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UNDERSTANDING THE ENGAGEMENT OF TRANSFER STUDENTS IN FOUR-YEAR INSITUTIONS: A NATIONAL STUDY

BY

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Submitted in partial fulfillment
of the requirements for the degree
Doctor of Philosophy
Department of Education Leadership, Management and Policy
Seton Hall University

2016

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SETON HALL UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Martina Ghusson, has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ph.D.** during this **Spring Semester 2016**.

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ABSTRACT

The purpose of this study is to examine whether transfer status and type matter for student engagement and if so, what student characteristics affect this relationship. Data from senior students at four-year institutions across the United States who completed the National Survey for Student Engagement (NSSE) in 2009 were used. Descriptive statistics and multiple regression were employed to explore the relationship between transfer type, student characteristics and student engagement by benchmark.

The findings of this study suggest that with the exception of academic challenge, native students show higher levels of student engagement on the active and collaborative learning, student-faculty interaction, enriching educational experiences and supportive campus environment. Within the student population subgroups, overall native students are more engaged than horizontal and vertical transfers. Student characteristics, such as race, gender, GPA, and major are all found to be associated with student engagement.

ACKNOWLEDGMENTS

This dissertation could have not been possible without the support and dedication of my committee. First, Dr. Rong Chen, thank you for your patience and tireless work through the last several years. Your guidance and encouragement have been instrumental to finishing this study. Dr. Robert Kelchen and Dr. Martin Finkelstein, your feedback has been very helpful and I am very fortunate to have had the privilege to have you on my committee. Thank you!

DEDICATION

I would like to dedicate this dissertation to my mother, Maria Danailova, whose unconditional love and support have given me the confidence to reach all goals, this one included. Thank you mom for believing in me.

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CHAPTER I

INTRODUCTION

As the United States faces a plethora of economic and social challenges today, economic inequality between the racial and social classes remains a challenge (Baum, Ma, & Payea, 2013). It is increasingly clear that the U.S. higher education system must continue to evolve and improve the human condition in light of the social and economic context. Enrollment patterns, further facilitated by the transfer function of the U.S. higher education system, indicate that Americans recognize the value of investment in higher education. Benefits of higher education extend to individuals as well as the society and provide a chance to reduce economic inequality. However, low completion rates show that there are still challenges ahead. But despite the increased enrollment levels, completion rates remain low, and this suggests that there is a fundamental problem hindering student success and academic achievement (National Center for Public Policy and Higher Education, 2011).

The cost of students leaving college without a bachelor's degree is great for individuals and society alike. Student engagement has shown great promise in alleviating the issue of low retention and graduation rates (Price & Tovar, 2014). While the college experience varies for everyone, research suggests a positive link between student engagement and academic performance regardless of student type (Carini, Kuh, & Klein 2006; Pascarella & Terenzini, 1991, 2005). The more actively engaged students are in their education, with faculty and staff, with their peers, and with their studies the more likely they are to learn, remain in school, and attain their education goals.

Benefit of Higher Education

While a college degree does not necessarily guarantee a certain quality of life, financial independence, or even employment post-graduation, evidence overwhelmingly suggests that the personal and societal benefits of a bachelor's degree far outweigh those of a high school diploma for most people. For example, researchers have examined this very relationship between college education and overall quality of life and the findings support that earnings are significantly higher for college graduates: $21,100 over the course of 1 year, than the median earnings of high-school graduates and earnings rise more rapidly for college graduates over time (Baum, Ma, & Payea, 2013). The benefits of higher education also extend to society at large. For example, state and federal governments collect increased tax revenues from college graduates and spend less on income support programs, adults with a college degree have been found to be more likely to receive health insurance through their employer, and college graduates have been found to be more active citizens who vote and volunteer in their communities (Baum, Ma, & Payea, 2013).

The national policy agenda is also aligned with the benefit of higher education, with a particular focus on the community college, since close to half of all college students choose community colleges as their entry point to higher education (AACC, 2014). Recently, President Obama expressed a commitment to make community college "as free and universal as high school" (State of the Union Address 2015); an indication of shifting priorities in the funding of education and the idea that college education is not a privilege for those who can afford it, but rather a right for all. There was, however, no mention of how the federal initiative could help students succeed once they are in college, how to keep them engaged and interested in their education, and what programs and services will lead to academic success. The President's

proposal, which is yet to gain the approval of Congress, is only the first step in helping all Americans compete in the global economy. This initiative is likely to increase the numbers of college students across the social and racial classes and benefit students from lower socio-economic backgrounds because it will allow students to earn the first half of a bachelor's degree and skills needed at the workforce at no cost, which has been an obstacle for many low and middle income families (Holland, 2015).

The financial crisis in 2008 and the recovery efforts thereafter showed that higher education must change in order to meet the needs of society of taking best advantage of human and physical resources by training and educating a work force that can effectively respond to new economic challenges. The face of the college student has certainly changed. More women, minorities, and individuals who return to higher education later in life are looking for opportunities to better their lives and those of future generations, and the ability to start at the community college and later transfer to another institution on their path to a college degree allows them to do so at optimal cost and best institutional fit. For example, community colleges serve as an entry point for many historically underrepresented groups in higher education and enroll 51% of all Latino and 41% of all African American college students in the country (Crisp & Nunez, 2014) and a number of them successfully transition into 4-year insinuations.

College Students: Enrollment Patterns and Engagement

Access to higher education has improved significantly in recent years. Between 1992 and 2002 enrollment in degree-granting institutions increased by 15%; between the years 2002 and 2012 it increased another 24% growing from 16 million to 20.6 million students, most of whom are enrolled on full-time basis, and are women and minorities (U.S Department of Education,

NCES, 2015a). These enrollment patterns support the show that many Americans perceive higher education as a chance for upward mobility.

Furthermore, the transfer feature of the American higher education system has made it easier for a lot of students to expand their choices of institutions and educational experiences. Transferring from one college to another has become an increasingly important trend, and recent data suggest that, for the 2013-2014 academic year, as many as 46% of graduates at 4-year institutions were previously enrolled at 2-year institutions (National Student Clearinghouse, 2015).

As 2 and 4-year institutions expand post-secondary capacity and choice, student engagement has found a place in the dialogue on institutional effectiveness, precisely because it evaluates direct student behavior as well as the impact of the educational environment as institutions look for way to improve the education experience. Research suggests that student involvement in college shapes student learning outcomes: “What students do in college counts even more in terms of what they learn and whether they persist in college than who they are or even where they go to college” (Kuh et al., 2005, p.8). Therefore, institutions continuously seek ways to create favorable conditions for engagement, such as curricular and co-curricular activities, tailoring programs and services according to student needs, and improving environmental factors that foster student engagement and academic success, as defined not only by GPA, but retention and graduation rates and other quantitative measures.

Student engagement is, simply put, the amount of time, energy, and effort students invest in their education, and it is the single best predictor of learning and personal development (Astin, 1993; Pascarella & Terenzini, 1991; Pace, 1980). Recent research has focused on establishing the relationship between student engagement, academic success, and other positive educational

outcomes since student engagement has been found to positively affect retention, grades and GPA, self-reported gains in learning and personal development, and gains on other liberal education outcomes (Kuh, Cruce, Shoup, Kinzie & Gonyea 2008; McCormack, Pike, Kuh, & Chen 2009; Pascarella & Terenzini, 2005; Pascarella, Seifert, & Blaich, 2008; Pike, 2006). Studies like these are important not only because they define and explain student development, but also because they suggest ways for institutions to foster opportunities for student success and highlight the importance of student engagement for academic success and social integration. This line of research has suggested that a positive relationship between student engagement and student success exists despite background factors. However, due to the differences in college choice and path to a bachelor's degree and differences of student engagement levels between transfers and native students, further research is needed to examine the roles of transfer status and background factors student engagement, since transfer students continue to lag behind in graduation rates and face certain issues such as *transfer shock* and drop out.

The concept of *transfer shock* refers to the academic engagement of transfer students. The term was coined by Hills (1965), who analyzed the transition of junior or community college students, to 4-year institutions. He found that the majority of these students experienced a dip in their GPA after the transfer. Hills referred to this phenomenon as transfer shock, because after the initial decline the grades improved as students persisted. Other studies have also supported the notion of transfer shock, and the findings of these studies were that students who transferred from smaller institutions were more likely to face academic difficulties and be placed on academic probation (Cejda, Kaylor & Rewey, 1998; Lannan, 2001).

Conditions of Student Engagement

Kuh (2009a) defined student engagement as the amount of time and effort students apply to educationally purposeful activities that promote their learning and development. Engagement also refers to efforts institutions intentionally create to foster learning and development (Kuh, 2009a; McClenney, Marti, & Adkins, 2007). Therefore, in addition to student effort, student engagement requires certain environmental conditions. Institutions strive to provide rich learning experiences that develop critical thinking and writing, creativity, social and academic engagement, and help students to become global citizens. The Association of American Colleges and Universities (Kuh, 2008) outlined several concrete, effective educational high-impact practices that have since gained public attention. Among these practices are first-year seminars, writing-intensive courses, learning communities, collaborative assignments and projects, internships, and capstone projects and courses. Kuh (2008) reported strong positive effects on student experience as a result of participation in high-impact activities. More specifically, historically underserved students experienced "compensatory effects or a "boost" in grades and retention during their first year of college as a result of taking part in these activities (Kuh, 2008, p. 17). Others (Chickering & Gamson, 1987; Pascarella & Terenzini, 2005) have also examined good practices in undergraduate education and have identified factors, such as student-faculty contact, active learning, prompt feedback, time on task, high expectation, respect for diverse learning styles, and cooperation among students as meaningful not only to student success, but to student engagement as well. This line of research suggests that students and institutions both play a role in student engagement.

Student engagement is what students do--the time and energy they invest in educationally purposeful activities and what institutions do as well--using effective educational practices to

encourage student involvement in high impact educational activities. As Pascarella and Terenzini (2005) concluded, "if, as it appears, individual effort or engagement is the critical determinant of the impact of college, then it is important to focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602).

This line of research supports the notion that students develop in holistic ways, and that the root of this development is in academic and non-academic domains. The conditions for student engagement align with the role of institutions as creating the right kind of high impact activities to foster student engagement regardless of student background or previous experience with higher education.

Importance of Student Engagement

The contemporary research on student engagement has largely agreed that student engagement, or the amount of time students invest in their education, is positively linked with desired outcomes of undergraduate education (Pascarella & Terenzini, 2005). While this remains true, the meaning of the construct of student engagement has evolved in time to include the complex relationship between desired outcomes and how students spend their time studying or taking part in other educationally purposeful activities.

Among the benefits of student engagement is that it has a balancing effect, or a way to overcome initial academic challenges, on grades and persistence for students who enter higher education or transfer to another institution but lack the adequate preparation to succeed academically. What this implies is that the more engaged students are, the more likely they are to succeed in college and have a positive experience even if they enter inadequately prepared (Cruce, Wolniak, Seifert, & Pascarella, 2006; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008;

NSSE, 2007; Pascarella & Terenzini, 2005). Interactions with faculty and staff, peers, and the environment can not only make up for deficiencies in academic preparation but ultimately lead to higher persistence and graduation rates as engaged students spend meaningful time on task and invest more time and effort in their education. In the following section, I discuss who transfer students are and why it is important to understand student engagement for this student group.

Trends and Issues for the Transfer Population

As mentioned previously, with improved college access, students can make a lot of choices as to where to pursue their college education. Today about a third of all students change institutions at least once before they complete their degrees, and this defies the traditional college experience (Hossler, Shapiro, & Dunbar, 2012; Simone, 2014). Understanding the unique characteristics of transfer students and issues surrounding this student group is important when tracing their unique college experiences and engagement levels.

With the change of their academic environments, transfers are extremely likely to face a number of challenges, including academic, social, and personal, and that is why it is important to consider and evaluate their experiences (Ishitanti, 2008; Laanan, 2001; Townsend & Wilson, 2006). There are several predominant assumptions about transfer students, such as their inability to navigate through college (Tobolowsky & Cox, 2012), while, in fact, resources that have significant impact on student behavior such as financial aid, housing, and orientation, are mostly available to the native student population (Porter, 1999). As a result, transfer students are likely to struggle in their college experience. Some have even suggested that most institutions lack an understanding of how to support transfer students, largely due to the variety of reasons behind why students switch institutions, which in turn widens the gap between how transfers and native students experience higher education (Kirk-Kuwaye & Kirk-Kuwaye, 2007).

Student integration is important to address for transfer students, since their transition is largely influenced by how successful they are in integrating with the host institution. There are two types of integration defined in the literature: academic integration or "the formal education of students. Its activities center around the classrooms and laboratories of the institution and involve various faculty and staff whose primary responsibility is the education students" (Tinto, 1993, p. 106), and social integration, defined as "reoccurring sets of interactions among students, faculty and staff that take place largely outside the formal academic domain of the college" (Tinto, 1993, pp. 106-107). The academic challenges they face, such as managing the academic rigor of the host institution and large class sizes, have been well documented (Townsend, 1993, 1995). Experiences such as transfer shock, discussed in more detail later in this chapter, show that academic difficulties remain a priority for transfer students.

Unlike academic integration, social integration for transfer students has received less attention from researchers. While most transfers prioritize on academic integration and some have limited time on campus, transfers face a number of social challenges which affect their college experience, such as making friends, breaking into existing social groups and adjusting to the new social climate (Laanan, 2007). Furthermore, Laanan (2007) found that students who participated in clubs and organizations found it less difficult to adjust socially to their host institution. He also concluded that students who spent more time socializing with peers experienced positive social adjustments. Individual characteristics, such as age, work commitments, and residence tend to make it difficult for transfer students to fully integrate into the social atmosphere on campus and make social integration one of the biggest challenges after the transfer.

Another issue for transfer students is the fact that they are often discounted by college administrators due to the fact that they do not contribute to graduation and retention rates and can be a challenge to measure (Cook, 2012). There is a lack of appropriate programs and services for transfer student--,such as orientation, advising--and other institutional initiatives tend to target freshmen students and tend to overlook the older and transfer populations, and ultimately this marginalizes these student groups (Kuh, 2003). Indicators, such as grades, persistence, satisfaction, and gains across desired educational outcomes go along with student engagement and all of these factors affect the transfer population (McCormick, Sarraf, BrckaLorenx, & Haywood, 2009).

Concerns about the Transfer Student Experience and Engagement

With the increased mobility of college students, concerns also arise regarding their academic experiences and engagement at the host institution.

While studies of post-secondary outcomes of horizontal transfer students are limited the available data shows that while the national baccalaureate completion rate for non-transfers is 59%, only 17% of students who start at the community college level successfully transfer and graduate with a bachelor's degree (U.S. Department of Education, NCES, 2015b). Unlike studies of students from community colleges who are tracked at the community college level and beyond the transfer, there is a lack of studies of the degree outcomes for horizontal transfers, so their experiences have not been reflected in the literature. Studies on transfers often focus on measurable variables such number of credits transferred, number of previous institutions attended, and time between enrollments. While there is some very brief mention of horizontal transfers in the literature (Goldrick-Rab & Pfeifer, 2009), transfer students tend to be defined

predominantly as community college students transferring to 4-year institutions, and most research typically compares characteristics of vertical transfer students to non-transfers.

According to some researchers, there are certain factors that influence transfer students' academic success after the transfer. Prior academic performance and first-semester GPA are the strongest predictors of persistence and academic success after the transfer (Pascarella & Terenzini, 1991, 2005), so improving relevant conditions should be a focus for all host institutions. Perhaps, unlike non-transfers and the transfer students at 4-year institutions who tend to fall into the traditional student category, students at the community college tend to be older, enrolled predominately part-time, be more of minority status, be from lower socio-economic backgrounds, and be students who work both full and part-time more than students at 4-year institutions (AACC, 2014). These are background characteristics that influence the college experience.

Student engagement for transfer students is especially problematic. Research has found differences between transfers and non-transfers: transfer senior students participate in collaborative learning at much lower rates than their non-transfer counterparts (NSSE, 2014); first-year transfer students found their campus environments to be less supportive than non-transfers and educational practices seemed to be less effective for transfer students (NSSE, 2013a). Transfer students also show lower levels of integration with the host institution. For example, this group of students has been found to feel less academically connected to the new institution, report less interaction with faculty, have fewer opportunities to participate in student life, be confused about transfer policies (Townsend &Wilson, 2009).

The lower engagement levels and the social and academic challenges that transfer students face suggests that there are fundamental issues with the educational experience of this

group of the student population. In order to help their transition and to keep them on track to earn a bachelor's degree, improvements for student success and engagement for the transfer group must be put in place.

Research on Transfer Students' Engagement

In the last two decades, a great deal of research has focused on student engagement (Astin & Sax, 1998; Carini, Kuh & Klein, 2006; Huh & Kuh, 2003; Zhao, Carini & Kuh, 2005). As institutions continue to focus on activities and efforts to engage students, it is important for researchers to maintain focus on the importance of student engagement for all students. However there are several major limitations with current research:

Limited Understanding of Student Engagement

Studies on student engagement have provided only limited understanding of the student experience. Background characteristics and non-academic agents, such as institutional commitment and social support, may also influence academic performance, and these are factors not measured by student engagement indicators. The differences in the student engagement levels between transfer and native students suggest that their experiences vary, and therefore more research is needed to confirm the differences and, if these differences do exist, to examine the reasons.

Lack of Research Differentiating the Types of Transfer Students and Their Engagement

Most of the research has examined the reasons why students transfer, not their experience after the transfer, and even fewer studies have focused on the student engagement of transfer students. One of the biggest obstacles that transfer students face after their transfers is social

integration. Townsend and Wilson (2006) conducted a single-institution study and looked at students who transferred from a small community college to a large 4-year institution oriented toward traditional-age, full-time residential students and concluded that transfer students did not make many social connections with peers at the host institution because they were much older than their peers and commuted. Others agree that transfer students have less focus on student engagement and rely mostly on their interactions in the classroom for engagement and have little social contact outside of class (Borglum & Kubala, 2000). But none of these studies differentiated between transfer student type.

The time of transfer is also important for student engagement. Ishitani and McKitrick (2010) compared the student engagement of community college transfer students to that of native students at the 4-year colleges and found that the first group was less engaged than native students and also that students who transferred later were less engaged than students who transferred earlier in their academic careers. Student engagement research has found that transfer students tend to be marginalized, with the majority of this research focused on traditional non-transfer students, who have different background characteristics and experiences than traditional students. Today, close to half of all students are age 21 or younger, and about 22% are over the age of 30 (Baum, Ma, & Payea, 2013). By institutional level, for 2012, 12.7% of students ages 18 to 24 were enrolled in 2-year institutions, while 28.3% were enrolled in 4-year institutions (U.S. Department of Commerce, 2013). Within the transfer group, about one-third attended 2-year institutions and transferred to 4-year colleges by the age of 25 (Surette, 2001), and most transfers have been found to be 29 years or older by the time they graduate from a 4-year institution, in contrast to the average age of 22 years at graduation for non-transfers (Phillippe & Patton, 2000).

Some have cautioned that the engagement construct relies too heavily on the assumption that students are full-time, traditional-age, and residential students, and that it omits students from diverse backgrounds and historically underrepresented groups (Bensimon, 2007; Harper & Quaye, 2008). While generally students from all backgrounds benefit from student engagement, conditional effects apply; meaning some activities have a higher impact on certain students and less impact on others (Pascarella & Terenzini, 2005). There has been limited attention to how transfer students differ from their non-transfer peers as to their level of engagement in college.

Research studying variations in engagement levels across the transfer groups in comparison to native students is limited. While some have acknowledged that horizontal transfers have barely been the subject of study (Jacobs, 2004), little has done to address this need. Only in recent years have a few studies focused on student perceptions of the transfer process, such as feelings, experiences, satisfaction, transition, and adjustment after the transfer (Cameron, 2003; Laanan, 2001). In previous literature, scholars have examined the community college experience on one hand and the traditional 4-year student on the other, but there is a strong need for researchers to examine an overlooked segment of students--horizontal transfers--meaning those students that transfer from one 4-year institution to another and their experience on campus. In particular, it is important to investigate not only why students transfer, but what happens to them after the transfer. Up to this point in time, horizontal transfers have been treated as students who stop or drop out of education, while, in reality, some transfer students continue in higher education. The graduation rates of horizontal transfers have not been reported by institutions (Cook, 2012), and it is not clear what makes these students successful. Currently, there is a lack of focus and effort toward addressing the unique student characteristics of this group. Understanding who these students are, where they attend college, and how they utilize

their time can make all of the difference in their chances to obtain a bachelor degree and continue on their path to financial independence. *Student engagement* has been a part of the research lexicon for a couple of decades. Its role is clear for students who begin and graduate from the same 4-year institution. Institutional initiatives such as the first-year experience, living and learning communities, and peer and faculty support are all examples of institutional efforts aimed at improving academic success, and they are the result of research on student engagement. These efforts, however, have been concentrated on traditional students and not on the transfer population. In the light of the President's plan to fund community college education, and its potential impact on enrollment and inclusion in higher education, more research on the link between student engagement and academic success by student type is needed.

Issues with Measuring Student Engagement

Even with reliable tools such as the National Survey of Student Engagement student engagement remains difficult to measure. Self-reported student data raises questions about validity and reliability, as students may find questions unclear or uncomfortable to answer. In addition, student engagement does not measure other important factors such as scores on standardized admissions tests, which tend to be strong predictors of first-year academic success. Researchers need to be aware that these and other factors influence student engagement, and studies must examine these additional aspects, relevant to all student groups.

In conclusion, transfer students, whether they come from community colleges or other 4-year institutions are often overlooked in the research, yet they are significant in numbers and important to institutions and the economy at large, as transfer students may fail to connect with the host institution, underperform, or leave yet again. Failure of institutions to engage them leaves great consequences, as it negatively affects other educational outcomes such as GPA.

There is a complicated interplay between a variety of social, economic, cultural, and education factors that influence student success in college (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). In addition to persistence and graduation rates, student success is commonly measured by academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, attainment of educational objectives, and post college performance (Kuh et. al., 2006). While academic preparation has been found to be important in predicting student success in college (Dennis, Phinney, & Chuateco, 2005), what students do in college, meaning the activities students engage in and institutional efforts to create conditions for student success, can become the deciding factor in academic success (Kuh et al., 2006).

Overview of This Study

Given the persistent differences in student graduation rates for transfer students and the inconsistencies of student engagement research across student type (native, vertical, and horizontal transfers), and lack of research on transfer students in general, this study sought to explore whether transfer students were as successfully engaged in their education as students who did not transfer. Research comparing the different engagement levels of students from different transfer status backgrounds can be helpful to meet this need and to highlight the importance of student engagement in general.

This study will remedy the limitation in the literature by examining whether differences in engagement exist between student transfer status types at all, and what other key characteristics are related to student engagement. To this end, I propose the following research questions:

1. Is transfer status related to student engagement levels in general?

2. If yes, does such relationship differ by transfer type (vertical, horizontal, vs. native)? and
3. What other student characteristics are associated with student engagement?

The conceptual framework for this study draws on the construct of student engagement to explain differences between transfer and native students, as literature and prior research suggest. Common institutional engagement practices are also reviewed in this study in order to understand institutional efforts to foster student engagement and environmental impacts on student engagement. The sample used for this study comes from the National Student Engagement Survey (NSSE, 2009), which is the most comprehensive national study of student engagement. Given the student engagement construct and student type, in addition to descriptive statistics standard multiple regression is used in this study.

Significance of the Study

As economic inequality remains an issue, investing in higher education is widely recognized as among the best means to ameliorate the human condition (Baum, Ma, & Payea, 2013). Today, more students enroll in higher education than in any previous decade and the numbers continue to grow (U.S Department of Education, NCES, 2015a). There is a vast number of students who transfer between institutions or enter college at a later time in life or after a pause. While these enrollment patterns show positive trends in enrollment, completion rates remain low in light of enrollment success among diverse socio-economic and racial groups and the transfer path so many take. As previously mentioned, one way to improve educational outcomes among all student groups, especially for transfer students, is to focus on student engagement.

Student engagement is shown to matter more for student learning than institutional characteristics or prior experience in higher education. Student mobility and transfer patterns

indicate that at least one-third of all students would transfer at some point in their journey to a bachelor's degree however this research still remains limited to transfer students. What the literature has suggested, is that differences exist between student engagement and levels of transfer and non-transfers, especially for first-year transfer students who show the lowest levels of engagement (NSSE, 2013a, 2014).

Besides student efforts to engage in their college experience, the conditions that institutions create are also important for student engagement, regardless of student status. High-impact practices, learning communities, collaborative learning (Brownell & Swaner, 2009), student-faculty contact, active learning, and respect for diverse backgrounds (Pascarella & Teremzini, 2005) all suggest that students and institutions both play a role in student engagement. However, transfer students face a different set of challenges that native students.

A growing number of studies point out the importance that student engagement plays in student learning (Kuh, 2003; Pascarella & Terenzini, 2005). Some institutions are more effective in promoting learning and creating educationally effective environments than others. Certain practices, such as faculty interaction or collaborative learning, are well established as beneficial to student success, while other practices do not always work well for all students or institutions, especially for transfer students who have shown to engage at lower levels than native students. Policymakers and institutional leaders must understand the importance and value of student engagement, especially for the more marginalized student populations, such as minorities, older students, and transfers.

The comparison of transfer-student completion rates and engagement levels to those of native students has suggested that there are some barriers to transfer student success. Time between enrollments is a crucial barrier to success, as institutional policies facilitating the

transfer process must be in place. Furthermore, as the number of credits at the time of transfer matters to student success, it is necessary for community college and 4-year institutional leaders alike to seek ways to help their students to reach the maximum number of credits prior to transferring out. Unless campus and public policymakers address the lag in educational outcomes between the two groups, transfer students will continue to lag behind.

Recent studies (Bailey & Alfonso, 2005; Crystal, Gansemer-Torf & Laanan 2013; D'Amico, Dika, Elling, Algozzine & Ginn 2013; Lester, Leonard, & Mathias 2013) have already looked at differences in engagement levels between transfer students and native students and have sought to understand happens to transfer students after the transfer. However, these studies draw data from either a single institution or utilize a very small sample of participants or generalize prior results. What the present study contributes to this research is that it is comprehensive, uses a large national data set, and engagement levels are compared within student groups and clusters within institutional type.

This study is significant because it takes another look at the transfer population on a national level, addresses some of the gaps in the literature, and contributes to the line of research on student engagement with a focus on the transfer population. Most of the studies on student engagement focus on the traditional non-transfer student experience, and few studies have examined community college transfer students. Previous research has also suggested that transfer students exhibit lower levels of engagement in comparison to non-transfers, and this study identifies how wide these differences are, especially within the transfer student population, which is a topic largely absent in the literature.

Organization of the Dissertation

This dissertation includes four more chapters. Chapter II discusses theories of student engagement and synthesizes relevant studies on student engagement of transfer students. Chapter III presents the research design, including the data source, the sample, research methods, and analytic procedures. Chapter IV reports the finding of the data analyses. Chapter V presents the conclusions, implications, and recommendation for future research.

CHAPTER II

LITERATURE REVIEW

With the increase in access to higher education in the past century, student development theories have sought to understand student learning and interactions with the educational setting by intertwining fields of psychology, sociology, and education. In the early 20th century for example, psychological theorists examined human behavior and development beyond just moral character formation and have focused specifically on the experiences of students in college (Upcraft & Moore, 1990). This marked the start of student development theory. Student development theory has continued to play an important part in higher education research as students have faced new challenges. Among these contemporary factors are price, student choice, and mobility, all of which influence the decision to transfer. For the purpose of this study, the terms student engagement, involvement, and integration are used interchangeably to define the student engagement outcome. As a result of the evolution of student engagement theory, the nuances between these terms have become insignificant, and the terms have been increasingly used to carry the same meaning in the literature.

This chapter first introduces the concepts of student engagement and the transfer process, review and analyze then appropriate theories generally used in student engagement research are reviewed and analyzed, and then the prior research on the effects of transfer on college student engagement is synthesized. In conclusion, this chapter will propose a comprehensive conceptual framework to research student engagement levels for transfer students. Because this study focused on transfer students who came from community colleges as well as other 4-year institutions, this literature review focuses on student engagement at 4-year institutions since this

is the point of their academic journey where their engagement levels were compared and data was available.

Defining and Measuring Student Engagement

Before reviewing theories and literature, it is important to understand how student engagement was defined and measured in prior research. Kuh, Kinzie, Cruce, Shoup, and Gonyea (2007) defined student engagement as participation in educationally effective practices, both inside and outside of the classroom that lead to a range of measurable outcomes. This definition also includes the "quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes" (Hu & Kuh, 2001, p, 3). In other words, student engagement is "the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (Kuh, 2009a).

Alexander Astin's student involvement research in the 1980s laid the foundations for modern day student engagement research and theory. Astin (1984) defined student involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297), and he argued that for learning to occur, students need to actively engage in their educational environment and educators need to provide in and out of classroom experiences to facilitate student learning behavior. Alexander Astin emphasized the role of student involvement in development and inspired valuable research in education.

The basic tenets of the student engagement construct incorporate concepts and research on student involvement, time on task, academic and social integration, and what are considered good practices in higher education. According to Kuh (2009b), research on student engagement, as it is used in research today, dates as far back as Ralph Tyler's research of time on task and its

connection to education in the 1930s. Tyler was the first to demonstrate the positive effects of the time students spent on task and learning (as cited in Merwin, 1969). A few decades after Tyler, C. Robert Pace focused on the concept of quality of effort and developed the College Student Experience Questionnaire. His research showed that students gained more from their education when they invested a greater quality of effort in their education and when they invested more time in learning and educationally purposeful activities, such as studying and interacting with peers and faculty (Pace, 1990). Astin (1984) later recognized the importance of the quality of effort in education, and this inspired his student involvement theory. Pace's research on the quality of effort and Astin's research on student involvement have inspired other prominent researchers, such as Chickering and Gamson (1987), whose research focused on good practices in undergraduate education and Vincent Tinto's ideas about social and academic integration and student departure theory. This line of research has contributed to the construct of student engagement and the NSSE instrument.

> The engagement principle is easily understood and it rests upon the assumption that, the more students study a subject, the more they know about it, and the more students practice and get feedback from faculty and staff members on their writing and collaborative problem solving, the deeper they come to understand what they are learning and the more adept they become at managing complexity, tolerating ambiguity, and working with people from different backgrounds or with different views. (Kuh, 2009b, p.5)

There are scholars who do not fully agree that involvement and engagement carry the same theoretical and practical meaning. The differences between the terms involvement and engagement are mostly rooted in the role institutions play in student development. Student

involvement implies that the role of the institution is minimal because the role of institutions was not fully considered during the early stage of coining the term, *student engagement*, while engagement suggests that the role of the educational setting is pivotal, which later research has explained. In other words, student involvement pertains to the responsibility of the students to participate in their college experience given the educational setting, and the definition focuses on the amount of energy that the students invest in educationally purposeful activities. Student engagement adds a focus on the role that institutions play in creating educationally purposeful opportunities for students to take part in, and it holds that the institutions are responsible for contributing to positive student experience and growth (Wolf-Wendel, Ward, & Kinzie, 2009). While there are certain nuances that are different between involvement and engagement, there is a significant overlap of the terms; enough overlap that the terms could be used interchangeably. Astin has also indicated that, there are "no essential differences" between the terms; a claim supported by the NSSE's former director, George Kuh, as well (Axelson & Flick, 2011; Wolf-Wendel, Ward, & Kinzie, 2009). In fact, student engagement has come to refer to how interested in involvement students are in their education, and how connected they are to their institutions and each other. For the purpose of this study, involvement and engagement are used interchangeably.

The definition of and measures for engagement are also reflected in various research studies. Pascarella and Terenzini (1991, 2005) have made a significant contribution to the definition of student engagement and have demonstrated ways to evaluate the construct and its contribution to higher education. Their work focuses on the relationship between students and the educational setting and how institutions influence a variety of learning outcomes including student engagement. Their first research study (Pascarella & Terenzini, 1991), a meta-analysis,

was based on 2,600 studies, and their second publication (2005) contained direct applications to student engagement and explored the institutional effects on student learning and the role of institutions in creating and maintaining student engagement opportunities.

Others, including Lester, Leonard, and Mathias (2013), have also contributed to the definition by stating that the engagement is not about what students "bring" to college, but it is what they "do" in college, as far as behavior, such as pursuing educationally meaningful opportunities and the nature of the educational setting that supports or inhibits learning and positive outcomes, such as retention and graduation. What this definition adds is that institutional practices and environment can affect student engagement, and therefore institutions can encourage or inhibit student engagement. Schuetz (2008) offered the following definition of engagement: "a state of interests, mindfulness, cognitive effort, and deep processing of new information that partially mediates the gap between what learners can do and what they actually do" (p. 18). Most often student engagement has been divided into two main components: academic engagement and social engagement, which are often referred to as academic integration and social integration. This line of research demonstrates how complex the construct of student engagement really is. In research, while the principle definition of engagement remains consistent, most studies add nuances to the definition of the term. For the purpose of this study, these definitions accurately describe student engagement as a term and are guided the research.

As previously suggested, student engagement is measured by the extent to which students are engaged in good educational practices, and what they gain from their college experience (Kuh, 2001b). There are certain metrics, such as time spent on a particular task, engagement, and exchange of ideas with students who are from different backgrounds or attend campus activities

and events, which create a measure for the construct. This assessment is done by comparing students across five distinct benchmarks, which mirrors practices outlined by Chickering and Gamson (1987): level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment, all of which, research suggests, capture vital aspects of the student experience that were factored into the creation of the National Survey of Student Engagement (NSSE).

The National Survey of Student Engagement is the largest and most comprehensive instrument to date that measures student engagement based on measurable aspects of student behavior and institutional effectives. The National Survey for Student Engagement (NSSE) measures, "student behaviors highly correlated with many desirable learning and personal development outcome of college" (NSSE, 2013b, para. 1.), and it is the most commonly used instrument to measure student engagement among college students in the United States. Years of research on student engagement and student success have suggested that certain behaviors, such as interacting with peers and faculty, spending time on homework, and working collaboratively, are positively related to positive student outcomes, such as persistence and higher GPA. This survey is the most widely used measurement tool in student engagement research, and engagement levels are measured by five distinct benchmarks that were derived from the research and these include: Level of academic challenge (LAC), active and collaborative learning (ACL), student-faculty interaction (SFI), enriching educational experiences (EEE), and supportive campus environment (SCE).

Defining and Measuring Transfer Status

The second term discussed is student transfer. Today, about one-third of all college students transfer at some point in their higher education (Hossler, Shapiro, & Dunbar, 2012).

Understanding the types of transfer is important, as the transfer experience is often disorganized, moving back and forward and in unpredictable fashion (Hagedorn, Moon, Cypers, Maxwell, & Lester, 2006). Traditionally, the term *transfer student* refers to a student who enrolls at a 4-year institution after initially enrolling at a community college (Jacobs, 2004). However, research has highlighted that students are far more mobile and many transfer multiple times across multiple institutions and institutional types and their reasons vary.

Vertical Versus Horizontal Transfer

A vertical transfer student is one who moves directly from a 2-year community college or a vocational school to a 4-year college or university in order to obtain a bachelor's degree (Kirk-Kuwaye & Kirk-Kuwaye, 2007). According to researchers, most institutional policies and practices at 4-year institutions are designed for this type of transfer student, and there have been a variety of partnerships between community colleges and 4-year institutions so as to facilitate the transfer process (Kirk-Kuwaye & Kirk-Kuwaye, 2007). There is significant amount of research being conducted on community college students and on the vertical transfer. Many state institutions have policies and practices to facilitate the process for this group.

A horizontal student transfer is a student who starts at a 4-year institution and later transfers to another 4-year college or a university. This includes students who transfer within the 2-year sector (Jacobs, 2004). Unfortunately, research on horizontal transfers and navigating through college is extremely limited (Allen, 2007). The experiences and characteristics of the horizontal transfer student differ from of those of the vertical transfer. Although the horizontal transfer process assumes that students in this category move in a linear progression, they differ from vertical transfers in that they move from one 4-year institution to another. It is often assumed that horizontal transfers have few issues transitioning because of their prior academic

experience at a 4-year institution. In reality they have a harder time engaging on campus and have lower academic performance rates than vertical transfers (Kirk-Kuwaye & Kirk-Kuwaye, 2007). The reasons behind the horizontal transfer are clearly different that other the reasons behind other types of transfer but there are only a very few studies today which look this segment of the student population.

Reverse Transfer Versus Swirling Transfer

While not the focus of this study, two additional types of transfer students are worth mentioning. *Reverse transfers* are those students with credits from a 4-year college or university who choose to reverse their course of study and enroll at a 2-year community college after they have attended a 4-year institution (Hagedorn & Castro 1999). The other type of transfer student is the *swirling transfer*. Rather than progressing through the institutions in a sequential manner, the swirling transfers choose to enroll in a back-and-forth pattern; attending one institution for one term, moving into a second institution the next term, and then transferring back to the original institution the next academic term (McCormick, 2003). Because the focus of the current study is on student engagement at 4-year institutions and the available data is limited, reverse and swirling transfers were excluded from review and analysis.

Transfer Student Characteristics and Effects of the Transfer

The transfer rates are almost equal between horizontal transfers and vertical transfers: each is about 25 %. The other half of all transfers, happens with downward or between community colleges only (Hossler, Shapiro, & Dunbar, 2012), and there has been significant research in recent years that has examined this trend. With such mobility between institutions, understanding the educational experience of transfer students is important in order to know how

to create incentives for student engagement. Rich (1979) described several common characteristics among transfer students which are also true today: (a) they often harbor preconceived opinions about their new environment, and these opinions will influence how they interact with the new institution; (b) transfer students often believe that the change in college environment will remedy past academic issues; (c) a transfer student's social adjustment is dependent above all on his or her mindset; thus programs such as orientation must address issues such as involvement, desire to belong and institutional fit and social adjustment; and (d) transfer students perceive that they have to adjust to campus situation that they may view as less favorable than their previous institutions. This perception is largely due to issues related to starting over and finding a niche in a new environment. These characteristics concern student expectations from their transfer institutions and are common across transfer type. In terms of their background characteristics, as compared to native students, transfers are more likely to be older, tend to not live on campus, are more likely to work off campus, and are more likely to care for family members (McCormick, Sarraf, BrckaLorenz, & Haywood, 2009).

In addition to student characteristics unique to the transfer group, the transfer process comes with many challenges. Lester (2006) noted that most transfer students are concerned with the following: academic concerns, financial concerns, grades, and ethnic differences. Researchers have suggested further differences between transfers and native students. Among the biggest concerns for transfer students has been the sharp decline in GPA after transfer (Glass & Harrington, 2002) and lower graduation rates as compared to native students (Long & Kurleander, 2009; Ishitani, 2008). The phenomenon, known as *transfer shock* (as coined by Hills, 1965) refers to the initial GPA drop after transfer. Students usually recover after their first semester at the new institution. This fact suggests that there are assimilation and adaptation

issues that transfer students encounter at their host institutions. Those transfers who recover successfully after transfer shock are likely to graduate with GPAs higher than those of native students, and such academic adjustment is directly related to intellectual self-awareness and confidence (Laanan, 2007). The issue of transfer shock and lower academic performance for transfer students is more complicated than simply lower GPAs in their first semesters. Researchers have found differences in transfer shock between men and women, with female student academic performance being significantly better a than that of male students (Al-Sunbul, 1987; Keeley & House, 1993), and transfer students who earned high GPAs at their initial institution tended to earn high grades at their transfer institutions (Carlan & Byxbe, 2000).

Research has suggested that social and academic integration are important factors for student success, namely retention rates and GPA as found by Tinto. The environment plays an important role in defining the student experience, and students are more likely to succeed when they find themselves in a supportive environment. Social integration, including integration with peers as well as faculty, is just as important for transfer students as it is for freshmen, particularly for retention and graduation (Pascarella, Smart, & Ethington, 1986; Tinto, 1975;). Studies have shown that among all of the various forms of social integration that take place in college, peer group association is most directly related to individual social integration (Tinto, 1975). This could be a particular challenge for the transfer student population, due to some of its specific characteristics, such as coming to the educational setting later on and having responsibilities outside of academic life, such jobs or caring for dependents. Not only are making friends and establishing social connections on campus challenging initially for transfer students, but some even report that the problem increases after the first year, when native students lose motivation to

associate and invite transfers to participate in collaborative assignments, study groups, and other social and academic opportunities (Townsend & Wilson, 2006).

Review of Conceptual Framework of Student Engagement Research

In order to explain the relationship between transfer status and student engagement, this section provides a solid theoretical framework to understand the engagement differences between transfer and non-transfer students. The theories reviewed inform how and why the variables in this study are connected. Student engagement theory will provide the framework for this study because it conceptualizes the NSSE survey as well as explains how students interact with the learning environment. Since this study involved transfer students as well, understanding the differences in engagement between transfers and non-transfers would not be possible without understanding the transfer process. Vincent Tinto's (1987, 1993) integration framework will inform their experience.

Student development theories generally fall into four main categories. Psychological theories focus on the self-reflective and interpersonal aspects of students' lives. These theories explain how students' perspectives of their own identity and society evolve through the personal conflicts and crisis. Cognitive-structural theories focus on how students think, reason, and organize and make meaning of their college experiences. Person-environment interactive theorie*s* focus on how the educational environment affect student behavior and grown. And lastly, humanistic-existential theories describe how students made decisions that affect themselves and others (Long, 2012). There has been significant research on student engagement in recent years, and there are several theories commonly used to conceptualize this construct. In addition, the diversity of the student experience is forcing many American colleges and universities to pay closer attention to student engagement as it is affected by transfer status.

These theories fall under the person-environment interactive theories. Multiple studies have been conducted in recent years that have explored student involvement at community colleges and students at 4-year institutions, and there are several common theories explaining the construct of student engagement and its relationship to transfer status. The theoretical framework that follows encompasses theories and models that explain student engagement and the transfer process. Because no single theory is capable of depicting the complexity of the college experience for both transfer students and native students alike, the use of more than one theory provides insight into relationship between student engagement and the transfer process. Since student engagement was the outcome variable in this study, theories about the quality of effort and student involvement provided a significant part of the framework for this study. Pascarella and Terenzini (1991) model of assessing student change focuses on the direct and indirect effects of a college or university's structural characteristics, and its campus culture. Vincent Tinto's (1987, 1993) integration framework will inform the understanding of the transfer process and how transfers adjust to their new environments. These theories summarize the person-environment interactive theories and were particularly useful because they all informed the research on student engagement, the transfer process, and the effect of educationally purposeful activities for transfers and non-transfers alike, and they address the complicated relationship between the individual and the environment that this study investigated. These theories are among the most common ones in the research of student engagement of transfer and native students.

Student Engagement Theory: Theoretical Construct

By definition, the construct of student engagement has two main components. It embodies the amount of time and effort students put in their studies and other educationally purposeful activities that lead to outcomes of student success, such as high GPA, persistence, and

graduation rates. It also includes programs and services and learning opportunities that institutions create for their students (Kuh, 2009b). Student engagement theory incorporates ideas from Pace's (1980) quality of effort, Astin's (1984, 1999) involvement theory, and Chickering and Gamson's (1987) seven good practices in undergraduate education, as discussed at the beginning of this chapter.

Quality of Effort

One of the first theories to gain a prominent place in student engagement research was Pace's (1979, 1984) theory on the Quality of Effort (QE). As part of this research Pace developed the *College Student Experiences Questionnaire* (CSEQ), which was the first attempt to operationalize and assess student effort. According to Pace (1992, p. 4): "accountability for achievement and related student outcomes must consider both what the institution offers and what the students do with those offerings." This implies that institutions have a responsibility to create opportunities for learning, while students have certain obligation for involvement. His theory suggests that student growth and development require that time and effort be invested by students, and that what they learn in college will largely depend upon the quality of their efforts toward their college experience; meaning how much effort is expended and how they utilize campus resources (Pace, 1979). Pace also maintained that there were various types of academic and social involvement, including library experiences, experiences in writing, the student union, experiences with faculty, and others. According to his theory, quality of effort comes from recognizing that certain activities take more effort and have greater impact on growth and development. His instrument measured the quality of effort in various environmental settings, such as libraries, classrooms, and laboratories, and these experiences reflect, "unidimentional hierarchy, meaning they are interdependent, in the sense that engagement in higher quality and

most difficult activities subsumes engagement in the lower quality or easier activities" (Pace, 1984, p. 11).

Pace's quality of effort theory enhanced the understanding of student engagement. The QE framework posits that development and educational outcomes are products of the time and effort students invest in educationally purposeful activities. When applied to transfer students, the QE framework highlights the differences of educational experiences between transfer students and native students and the processes by which they are involved in certain academic and social activities. Since Pace focused on the quality time invested in academic and social experiences on campus, for transfer students and their unique characteristics, time impacts factors like involvement, satisfaction, and adjustment. The role of the environment is also important, as programs and services at 4-year institutions may not adequately respond to the needs of transfer students and, as a result, poor quality of effort may reflect poor engagement and weak educational processes.

Astin's Student Involvement Theory

Alexander Astin's (1993) work on student involvement has had a significant influence on the development of the student engagement construct. The most basic assumption it maintains is that the more time and energy students invest in academic and co-curricular student activities the more learning that takes place (Astin, 1977; 1993). Building on Pace's (1979) QE model, involvement theory suggests that there are certain factors that influence student engagement, such as time spent on a task and interactions with faculty and peers, that, in turn, are positively related to educational outcomes. One of the strongest aspects of the involvement theory is that it can explain most of the empirical knowledge about environmental influences on student development that researchers have gained over the years (Astin, 1984). The theory of student

involvement is network-based and emphasizes the student relationship with the educational setting, and focuses on how student input effects the quality of output. However, there is a behavioral component: “It is not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement” (Astin, 1984, p. 298).

The conceptual basis of student involvement is rooted in a longitudinal study of college dropouts (Astin, 1975). Astin conducted a nationwide survey with a representative sample of undergraduate students that examined the extent to which certain factors, such as academic and family background, school cost, religious affiliation, study habits, and institutional practices influenced a student’s decision to drop out of higher education. Factors in the college environment were identified that significantly affected persistence rates. He concluded that the factors that contributed to the student remaining in college suggested involvement, and the factors that contributed to dropout suggested lack of involvement. Later, in his initial publication, *Four Critical Years*, Astin (1977) looked at changes in attitudes, beliefs, behavior, academic achievement, and career path, examined the relationship between student satisfaction with the college environment, and tracked how these characteristics changed. His theory of involvement officially was defined when Astin and his research team published an article in the *Journal of College Student Personnel* in 1984 titled, “Student Involvement: A Developmental Theory for Higher Education.” In his article Astin defined involvement as the physical and psychological energy students invest in their academic experiences. Therefore, a highly involved student is one who devotes considerable time and energy to studying, spends time on campus, participates in student life on campus, and has frequent interactions with faculty and peers. An uninvolved

student, consequently, is one who neglects studies, spends little time on campus, refrains from extracurricular activities, and rarely has contact with professors and other students.

Focusing on student effort, Astin (1999) suggested five main postulates about involvement: a) includes an investment of physical and psychological energy in various objects or tasks; (b) occurs along a continuum, meaning different students manifest different degrees of involvement in a given object, and the same student manifests different degrees of involvement in different objects at different times; (c) possesses both quantitative and qualitative features--for example, the extent of a student's involvement in academic work can be measured both quantitatively and qualitatively; (d) the amount of learning and development is directly proportional to quality and quantity of student involvement; and (e) the more effective educational policies and practices are, the more they promote student involvement. In addition to the five postulates, Astin revealed three other principles that were rooted in his conception model of involvement. First, student's psychic and physical times are finite. This suggests that the most valuable resource is time, and Astin referred to it as "zero-sum game"(p. 523), meaning that the time and energy that students invest in family, friends, jobs, and other activities outside of school would take away from the time left for educationally purposeful activities. Second, "time devoted" translates to involvement. This principle implies that the extent to which students can achieve a particular educational goal is a function of the time and effort they devote activities seeking to produce these ends. Lastly, though the construct of student involvement resembles the psychological construct of motivation, Astin preferred the use of the word *involvement*: "Involvement is more susceptible to direct observation and measurement than is the more abstract psychological term of motivation" (p. 301).

Involvement is typically utilized in research that has used Astin's Inputs-Environment-Outcomes (or I-E-O) model. The premise of the model is derived from the core tenets of Astin's theory of student involvement and is used to provide accurate assessment of how the environment impacts student outcomes, while input differences are controlled. This sociological model of college impact describes how student attributes affect academic success. The model holds that educational assessments are not complete unless the evaluation includes information on student inputs (I), educational environment (E), and student outcomes (O) (Astin, 1993). The student characteristics at the time of entry define inputs; the various programs and policies, faculty and peer interactions and all other educationally purposeful activities that students are exposed to comprise the environment; and student characteristics at the time of degree completion define the outputs in this model (Astin, 1993; Terenzini & Upcraft, 1996). According to Astin (as cited in Wolf-Wendel, Ward, & Kinzie 2009), "The advent of involvement theory led to the elaboration of the IEO model to include 'involvement' (also called 'intermediate outcomes') as an additional construct situated between Environment and Outcome (IEO)" (p. 411). Since the I-E-O model focuses on the impact of the environment, campus and academic life offer an opportunity for student involvement, showing the effects of various outcomes affecting student development.

In examining how the college environment affects student development Astin (1996) concluded that the most important type of involvement was academic involvement, including interactions with faculty and peers. Astin's theory of student involvement holds that in order for growth to occur, students must be actively engaged in their environment and institutions must provide learning opportunities in and outside of the classroom. Applying Astin's I-E-O model may be useful for understanding the student engagement of all students, but particularly for

transfer students, whose characteristics and environmental interactions lead to quantitatively different college experience.

Research on student involvement has found that high levels of involvement are linked to positive outcomes, such as satisfaction with the college experience, high academic achievement, and persistence in higher education (Kuh, 2001b). This line of thinking is instrumental to connecting effective educational practices to student outcomes (Wolf-Wendel, Ward, & Kinzie, 2009), and if differences in engagement levels exist, as the literature suggests, what are the practices that are most helpful to reduce these differences in student engagement. Astin's student involvement theory warrants use in predicting student engagement. The theory offers a way to measure academic performance, other factors of student success, and college satisfaction. It also suggests that the role of the institution is central to student success and that institutional practices affect student outcomes. Although Astin's theory of student involvement was developed as a result of studying persistence among traditional college students, it is easily applied to the study of horizontal and vertical transfer students at 4-year institutions. Not only does Astin's theoretical framework offer a way to measure components like time and effort, but it also offers a way to understand the complex academic and social adjustment process that transfer students encounter. According to Laanan (2004), when applied to vertical or horizontal transfers, the utility of Astin's involvement theory is clear: " if […] transfer students are involved in their social and academic activities at the two-and four-year levels, they will more likely experience a successful or positive academic and social adjustment at senior institutions" (p. 335). Therefore, if transfer students are involved in their educational development in their initial institution, they are likely to have similar levels of involvement at their host institutions.

Pascarella's Model for Assessing Student Change

Another theory belonging to the person-environment interaction category of student development theories is Pascarella's (1985a) model for assessing student change. Similar to some of Astin's concepts about the role of the institution in student development and Pace's notion of quality of effort, Pascarella's focused on the institution's structural characteristics and the campus culture in addition to student characteristics. According to him, student development and growth are a function of the direct and indirect effects of five major sets of variables: (a) students' backgrounds and precollege characteristics; (b) the structural and organizational features of the institution (such as size, selectivity, and residential character); (c) institutional environment or campus culture; (d) frequency and content of student interactions with the major socializing agents on campus (faculty and peers); and (e) the quality of effort put forward by the students (Pascarella, 1985a, p. 31). Pascarella's model for assessing student change is seen as a function of students' background characteristics, interactions with major socializing agents, and the quality of student efforts in learning and developing. He also believes that structural features of the institution have indirect effects on student development, and that they are mediated through the institution's general environment, the quality of student effort, and student interactions with peers and faculty. Pascarella's model for assessing student change is a general causal model that assesses student change. It is helpful in understanding student engagement and the experience of transfer and non-transfer students because it suggests that the campus environmental and structural characteristics affect student development and that student characteristics affect student development and change.

Tinto's Integration Theory, Student Departure and Engagement

One of the most influential theories to examine the transfer process and the relationship between transfer and engagement came from Tinto (1987, 1993). Initially, His theory focused on student retention, and he theorized that students were more committed to their institutions and more likely to graduate if they were socially and academically integrated into their environment. According to him, there are different types of leaving behavior: academic failure, voluntary withdrawal, permanent dropout, temporary dropout, and transfer (Tinto, 1975). At the heart of Tinto's model is the assumption that students who are integrated into their college develop connections and participate in college life and academic activities are more likely to persist than those who remain on the periphery. This is consistent with student engagement theory, but Tinto also focuses on individual characteristics that he believes affect the student's pre-enrollment commitment to their academic goal and the institution they choose to attend. The characteristics that Tinto highlights as important fall into three categories: (a) individual attributes, such as race, sex, academic ability; (b) pre-college experiences, such as school GPA and academic and social experiences; and (c) family background factors, such as value climates, social climates, and expectation climates. In addition to individual characteristics, Tinto emphasized that dropout is the result of longitudinal process of interactions between the individual and the institution he or she attends. Institutional fit and isolation are often the reasons that prevent student integration, and students who do not feel at home or connected to their institution do not believe that an institution can help meet their goals and they are unlikely to persist.

Tinto (1987, 1993) claimed that positive student outcomes depended upon the extent to which a student was successfully integrated into the academic and social structures of the

institutions. Fitting in is more important for student success than academic preparation or clearly defined goals. Concerned with why students transfer or depart institutions, he stated:

> "Nevertheless, there does emerge among the diversity of behaviors reported in research on this question a number of common themes as to the primary causes of individual withdrawal from institutions of higher education. These pertain on one hand to the dispositions of individuals who enter higher education and, on the other, to the character of their interactional experiences within the institution following entry" (Tinto, 1987, p. 39).

Therefore, the ways that students connect with their institutions and their experiences can be predictors of intent to transfer and level of engagement to the institution.

Tinto (1987) suggested that there are two dimensions of social integration, social and academic, and that they both enhance and interact with one another. Academic integration takes place when students interact with the academic opportunities created by their institutions, while social integration involves relationships and personal connections. Tinto maintained that there are formal and informal systems in the college setting to encourage both dimensions of integration. He also suggested that lack of integration is the reason why some students depart their institution or higher education altogether. Students enter with certain individual characteristics, such as socioeconomic status, family support, clarity of purpose for higher education, and cultural and social values, and institutions also pose certain characteristics (Tinto, 1993). Conflicts result when student and institutional characteristics fail to match and, as a result, students choose to depart or drop out if the sources of these conflicts remain unresolved. Tinto posited that the reasons behind student departure were mostly in three specific areas: academic

problems, failure to integrate socially and intellectually with the college culture, and a low level of commitment (Tinto, 1993, p. 24).

Tinto's theory of student departure is relevant to understanding student differences between and within transfer student groups because of its utility in understanding the reasons for transfer and because it focuses on social and academic integration as condition for student success. Tinto's theory holds that students who switch institutions for different reasons are faced with different experiences and resources on campus and, as a result, they exhibit differences in their engagement and satisfaction levels. Tinto (1988) suggested that for students to successfully transition, they must first separate themselves from previous relationships. This is particularly hard for transfer students who are likely to face difficulties integrating into the new campus climate and their host institution may not facilitate integration as it usually does for incoming freshmen and current students as well (McCormick, Sarraf, et al., 2009). Programs such as orientation and other socialization opportunities are usually only available to new and current students, and transfers are oftentimes excluded. Student departure, as for example when a student chooses to transfer out, may generally be due to academic difficulties, inability to meet academic goals, or failure to become or remain integrated into the institution. Student engagement is essentially the result of institutional and student efforts, and specific behaviors and environmental characteristics are the reason behind student departure. Understanding student departure theory and the role of engagement in it is essential in understanding student behavior and improving educational success.

Tinto's theory of student departure was particularly useful in conceptualizing the present study because it examines the relationship between transfer status and engagement from the perspective of student engagement. Tinto's theory suggests a negative relationship between

transfer status and student engagement. To clarify, because Tinto believed that integration was a factor for student engagement, academic success, and overall assimilation to the new campus environment, these are also among the biggest challenges that transfer students face after the transfer. Students leave college because they are unable to successfully integrate into their educational environment. Student engagement also relies on academic and social integration, which may marginalize the transfer population if institutional factors serving to help with integration do not exist.

The theoretical construct of student engagement combined with Tinto's integration theory and the unique characteristics of each transfer student group not only suggest that there are differences in the student experience between students who transfer and those who do not, but also indicate that the types of transfers may be differentially related to student engagement. My hypothesis is that there are differences in the student engagement levels of transfers and native students. It is derived from research on transfer students, as well as from Tinto's theory, which suggests that the integration process of vertical and horizontal transfers may differ in some ways. The reasons behind the transfer for each group vary, with vertical transfers facing bigger barriers to integration than horizontal students. Both groups, but especially community college transfer students, often experience much different environments than the ones they are accustomed to, due to the fact that they do not immediately connect with those who have matriculated as freshmen (native students), they experience different institutional culture and experience initial assimilation issues (American Council on Education, 2006). Furthermore, much of this lack of fit is enhanced by the additional problems transfer students experience with transfer credits, adequate housing, and class registration (Dowd & Cheslock, 2003; Townsend & Wilson, 2006). For students who are in pursuit of bachelor degrees from 2-year institutions into a degree-

granting senior institution of higher education, the transfer is a necessary step to obtain the bachelor's degree, while the reasons behind a horizontal transfer tend to be much more varied and oftentimes include unsatisfactory academic performance, academic, personal, or social dissatisfaction, financial affordability, and availability of academic programs (McCormick, Sarraf, BrckaLorenz, & Haywood, 2009). Research has found that students who begin at the community college and later transfer to a 4-year institution encountered more barriers to persistence, academic success, and assimilation than students who transferred from 4-year institutions (Jacobs, 2004). Berkner, He, and Cataldi (2002) looked at other outcomes, such as persistence, and built a profile of transfer students. Their study found that part-time enrollment, delayed entry into college after high school, having a child or other dependents, single parenthood, financial independence from parents, and full-time employment while attending college all negatively affect persistence. Many of these factors also accurately describe the average community college student (Jacobs, 2004), who is typically in his or her mid-20s and works at least part-time (AACU, 2016; Carlan & Byxbe, 2000). Unlike horizontal transfers, who largely share the same characteristics as non-transfers, for vertical transfers these factors add further difficulties to transfer and integration than and this group is likely to face the same barriers at the new institution (Jacobs, 2004) in addition to assimilating to the new environment.

The theoretical framework discussed above suggests relevant concepts and common theories guiding the research on student engagement and transfer students. The literature review which follows below examines research and empirical studies on transfer status and engagement as well as student and institutional characteristics which comprise the variables examined by this study.

Review of Literature: Transfer and Student Engagement

Even though the research on transfer student engagement is not robust, a few studies have contributed to the discussion on the topic, and research on the transfer student engagement is quite complex. In the next section, I discuss the relationship between student transfer and engagement, and then how, if at all, the types of transfer may differentially relate to student engagement.

Transfer Status

In general, a number of studies have suggested that the transfer student population seems to be less engaged that the non-transfers students before controlling for student characteristics (Kuh et al., 2006; McCormick, Sarraf, BrckaLorenx, &Haywood, 2009; NSSE, 2008). These studies found that there are certain conditions that impact the engagement of transfer students in comparison to non-transfers. A review of studies comparing engagement levels of transfer students to their non-transfer counterpart suggests that while overall non-transfers are more engaged than transfer students, the researchers cannot agree on the factors that affect the engagement levels of the student sub-groups. This lack of understanding of the factors that affect the transfer student population calls for more research on the topic.

The increase in the number of transfer students has led to researchers to examine the reasons why students transfer, but few studies have detailed the transfer experience after the transfer. Empirical analysis has found that there are differences in the engagement levels of native and transfer students (Bailey & Alfonso, 2005; Crystal, Gansemer-Torf & Laanan 2013; D'Amico, Dika, Elling, Algozzine & Ginn 2013; Lester, Leonard & Mathias 2013), and transfer

students are generally less likely to have time to become involved in campus activities outside of the classroom due to work or family obligations. Social engagement has also been found to suffer for transfers because social engagement comes from interacting with classroom activities (Baily & Alfonso, 2005; Crystal et al., 2013; Tinto, 1997). These studies have found that factors such as age, where students live, social engagement outside of the classroom, and sense of belonging are important factors for engagement, and they were more commonly factors that defined the non-transfer student experience.

For example, Crystal, Gansemer-Tord, and Laanan (2013) conducted a qualitative study of 22 traditional-age students who transferred from a 2-year community college to a 4-year institution. Specifically, their assessment looked at the reasons why students first enrolled at the community college, the mechanics of the transfer process, and the academic and social integration they experienced. The sample included students who transferred from one Iowa community college into Iowa State University, a large research university. The findings included the reasons why these students began at the community college, which included ambiguous future goals, lack of academic preparation, the desire to save money, and uncertainty about leaving home, and concern for the transfer of credits from the community college to the 4-year institution. They reported that their adjustments after the transfer were challenging. They found courses to be challenging and larger, and they reported a drop in their GPA after the transfer. Social integration was even harder for the transfer group. Participants reported that they felt isolated and lost, lacked a sense of belonging to the institution, and were generally less satisfied with their experience.

Another single institution study (Lester, Leonard, & Mathias, 2013) utilized a cross-sectional sampling design to understand more about the transfer student experiences. The host

institution was a large, 4-year, primarily residential, research university with a large transfer population. While the respondents were older than the traditional population, they still considered social engagement important, but theory relied heavily upon support from outside of the institution and lacked social integration inside the classroom. Academic integration was strong inside the classroom, but interactions with faculty outside of class were lacking. Responses on institutional fit were mixed.

Baily and Alfonso (2005) presented a critical analysis of the state of the research on the effectiveness of certain practices to increase persistence and completion at community colleges. These practices included: advising and orientation, learning communities, developmental education, and college-wide reform. The researchers completed a meta-analysis of data and empirical research and concluded that, in general, community colleges did not sufficiently engage their students and there was a general lack of consensus on what effective educational and engagement practices were.

Lastly, D'Amico, Dika, Elling, Algozzine, and Ginn (2013) conducted a quantitative study and developed regression models for the relationships between demographics and background variables of interest and perceived academic and social integration for community college transfers 6 weeks after the transfer. The researchers used a large, metropolitan, s institution that served a great number of transfer students, and they examined regression models for early academic and social fit and student success as measured by the following outcome variables: first-semester GPA, second-semester GPA, second-semester enrollment, third-semester enrollment, and academic hours earned in the first and second-semesters. The results indicated that academic and social integration were important for transfer students who often

struggled at the new institution. Consistent with the studies discussed in this section, academic and social integration happen mainly inside the classroom for the transfer student population.

Others also support these findings. Townsend and Wilson (2006) looked at transfer student experiences in their host institutions and found that they did not make as many social connections as their non-transfer peers because they were often much older than the traditional students. Ishitani and McKitrick (2010) observed that transfer students were less engaged than students who were native. Among the main reasons cited for this finding was the time of transfer (late transfer lead to lower engagement among the transfers). In addition, part-time status was negatively correlated to engagement for the transfer group. In conclusion, results support that transfer students have more of a difficult time engaging on campus and that the more students are involved both academically and socially the more successful they are in the transfer transition and the better their student experience (Flaga, 2006). Transfer students often miss out on programs and services such as orientation and co-curricular and extracurricular activities that aim to facilitate the transition to campus life and help to establish some academic and social connections, which are often available to freshmen. The lack of these opportunities for transfer students may lead to the development of a sense of isolation (Tinto, 1988).

The research on the type of transfer and student engagement is limited. Some studies have examined how the type of transfer related to student engagement. For instance, Roberts and McNeese (2010) found that students were engaged at the university on statistically different levels and it concludes that while non-transfer students exhibit higher engagement levels than transfer students, ultimately there were no statistically significant differences within the transfer group (vertical or horizontal transfers). Another study, Fernander (2012) found that there were certain factors, such as student-faculty interaction and supportive campus environment, in which

non-transfers were more engaged than transfers; moreover, these differences persisted after controlling for residence, enrollment status, and institutional control (public vs. private). In conclusion, the data gathered in this study did not indicate any significant differences among vertical and horizontal transfers.

Some variation between the types of transfer and native students exists, and their scores on certain engagement benchmarks exist. Fugard (2009) found that on the student-faculty interaction benchmark, vertical transfer students scored significantly higher than the non-transfer group. McCormick, Sarraf, BrckaLorenx, and Haywood (2009) also found that non-transfers were more involved in their college experience than transfer students on measures of student-faculty interactions, supportive campus environment, and overall satisfaction with college. They also found that horizontal transfers were more engaged in these benchmarks than vertical transfers, but that vertical transfers were more engaged with their faculty than horizontal transfers. Moreover, while non-transfers were found to be more likely to participate in activities known to promote student engagement, the difference between non-transfers and horizontal transfers was not significant. Not only did their background characteristics affect their academic performance and college experience, but often times they experienced transfer shock, which was characterized by sharp declines in GPAs during their first semester (Glass & Harrington, 2002; Ishitani, 2008; Laanan, 2001).

Last but not least, one study undertook the goal of focusing solely on the student engagement levels of horizontal transfers and moved beyond GPA as the sole indicator of transition for this transfer group. The researcher found that having horizontal transfer students who were academically prepared and actively involved with faculty and staff throughout the entire process of transition were the most important predictors of academic success (Allen,

2007). The research on the experiences of horizontal transfers is very limited and further empirical analysis of this group will likely contribute to better understanding of the experience of this type of transfer students.

As this review of relevant research has shown, there has been an effort to understand student engagement not only between transfers and non-transfers, but among the different sub-groups of undergraduate students. While these studies suggest that, in general, non-transfer students are more engaged than transfer students, this line of research also highlights the complexity of the transfer process and suggests the need for more research from different perspectives and settings. These studies propose that there are different factors, such as individual characteristics, type and time of transfer, contact with faculty and peers, and institutional environment that affect the engagement of transfer students, but there is lack of consistency in the research on these characteristics. Understanding the unique features of transfer students will contribute to understanding how they engage with their institutions and their educational outcomes. This is why the present study is important.

Review of Literature: Other Determinants of Student Engagement

The abundance of theoretical frameworks on student engagement has inspired an abundance of empirical studies that have operationalized engagement. These studies provide empirical evidence and measures of student engagement and suggest that, in addition to transfer status, other factors affect student engagement and educational outcomes. These factors can be grouped into two main categories: student characteristics (such as transfer status, gender, race and ethnicity, paternal education levels, enrollment status) and institutional characteristics (such as institutional control, classification, size and selectivity). Astin (1993) denoted that student characteristics are associated with student involvement and a variety of outcomes. Student

engagement theory suggests that engagement represents the time and effort students put into their time and studies, as well as how institutions deploy their resources to get students to participate in activities which research has identified as educationally meaningful for student development (NSSE, 2015).

Student Characteristics

Gender

Research indicates that gender is a factor in student engagement, and that there are differences in engagement levels between men and women. Kinzie, Gonyea, Kuh, Umbach, Bliach and Korkmaz (2007) found that undergraduate women participated more frequently than their male counterparts in educationally purposeful activities, and that male students devoted less time and effort to challenging academic tasks, such as working hard to meet expectations and spending time studying. Senior males also participated less often in active and collaborative learning activities. In addition, Astin (1993) found gender differences in understanding people of different racial and ethnic background. He reported that women reported more positive increases in cultural awareness, or racial/ethnic understanding, than men. Others have confirmed this finding and have concluded that men are less likely than women to engage with individuals who hold different values and religious beliefs (Hu & Kuh, 2003).

Race/Ethnicity

The effects of race and ethnicity in higher education have been long studied. Researchers agree that there are big disparities in graduation rates between White students and students of color. In particular, the 4 year college completion rate for African-American and Latino students is the lowest among all ethnic groups: only about 20.8% and 29.8% respectively, across all 4-

year institutions for the cohort that entered college in 2007 graduated (U.S. Department of Education, 2014), despite the increase in access to higher education. The wide gap in degree completion across racial categories along with public pressure for accountability (Bok, 2006) has increased the pressure to understand and improve the factors that contribute to student success. But when it comes to the relationship between race/ethnicity and student engagement, African-American students tend to show higher levels of engagement than their White counterparts (Sontam & Gabriel 2012). In terms of how prevalent the differences are within ethnic groups, research suggests that Latino and Hispanic students have the lowest level of engagement, while African American and Black students were at the top of all the ethnic groups and exhibited the highest levels of student engagement, with Whites and Asians in between (Temkin, 2004). However, perhaps due to cultural differences, Asian students were most engaged when working alone, while Latino and Black students have been found to be the most engaged when doing group work (Temkin, 2004). Others disagree. Research by Kuh et al. (2008) found no differences in engagement in educationally purposeful activities by racial background. However, most importantly, they found that African American students benefited more than White students from increasing their engagement in educationally effective activities. In relation to other important outcomes, they found that African American students at the lowest levels of engagement were less likely to persist than their White counterparts, but as their engagement increased, they were more likely than White students to return the following year.

Limited data exist in terms of tracing racial differences for transfer students at the 4-year institutions. Laanan (1999) examined racial differences and quality of effort across racial groups and found than non-White students were likely to have different experiences at both 2 and 4-year institutions than White students in terms of quality of effort, perceptions of the environment, and

educational background. In his study, White students reported significantly higher quality of effort with regard to faculty and learning and also reported higher GPAs than non-White students. His study also highlighted that a significant number of non-Whites were first-generation college students. This study is significant because it looked at the racial differences of transfer students at 4-year institutions and highlighted how race and other factors impacted the college experience.

Enrollment Status

Another important predictor of student engagement that should be considered is enrollment status. Because two-thirds of students at community colleges are enrolled part-time (AACU, 2016) and many of them continue to be enrolled part-time after the transfer, it is important to learn about their college experience.

Crosta (2014) examined the relationship between community college enrollment patterns and student outcomes-credential completion and transfer to a 4-year institution using data from cohorts of first-time community college students at five colleges in a single state. He found that students who were enrolled full-time enrollment and more likely to successfully transfer to 4-year institutions. Adelman (2006) conducted a national study and also found that students who did not attend full-time, who did not enroll continuously, or were unable to earn at least 20 credits by the end of the first calendar year were much less likely to earn a bachelor's degree.

Ishitani and McKitrick (2010) compared the educational experiences of community college transfer students and native students at one large, Carnegie doctoral-intensive, 4-year institution. Their sample included groups of senior native and senior community college transfer students, and they used NSSE benchmarks to assess the levels of the students' collegiate experiences. Consistent with the literature, they found that transfer students were less engaged in

the 4-year institution than native students. The results of this study also suggest that part-time enrollment has a significant negative impact on engagement, regardless of whether students are transfers or native to the institution.

Given that full-time students tend to spend more time on campus, they also have more opportunities to engage with campus life than part-time students. Whether there are more opportunities to participate in extra-curricular activities, socialize with peers across campus, or interact with their professors, the fact that full-time students spend more time on campus is bound to open more opportunities for engagement and make them more aware of engagement opportunities. Research has confirmed this expectation. Recently, Laird and Cruce (2009) found that not only do part-time students interact less with faculty and report less gains in general education than full-time students, but most importantly, the proportion of part-time students was found to be a negative predictor of student engagement with faculty. This means that campuses with greater numbers of part-time students are negatively affecting the engagement of full-time students.

GPA

Although the GPAs were self-reported, examining the relationship between GPA and student engagement indicators was important in the present study. Since the NSSE is based on research regarding effective educational practices that contributed to desirable educational outcomes, engagement scores are expected to be related to certain outcomes, such as GPA. This relationship is supported by the research of Carini, Kuh, and Klein (2009) who found that student engagement was positively related to GPA and other education outcomes. Others have also linked engagement scores to GPA and persistence (NSSE Psychometric Portfolio, 2009) and have found that students who showed higher levels of engagement were more likely to persist

after their second semester and earn more credits after their sophomore year than students with lower levels of engagement.

Fuller, Wilson, and Tobin (2011) examined the relationship between NSSE benchmarks and GPA. They used both a cross-sectional and longitudinal analysis. The results of the cross-sectional analysis found that level of academic challenge was a significant predictor of GPA for freshmen, while active and collaborative learning was a significant predictor for seniors. These findings suggest that at different points in academic careers, different behaviors affect educational outcomes. However, the results of the longitudinal analysis showed that no single NSSE benchmark was a significant predictor of GPA for either of the groups (freshmen or seniors), even though the longitudinal variance accounted for more variance than the cross-sectional analysis. Perhaps most importantly, the study found that each benchmark increased from when students completed the survey as freshmen to when the group completed the survey as seniors, suggesting that student engagement increased over time in college.

Employment Status

Because many transfer students tend to work during college (McCormick, Sarraf, BrckaLorenz, & Haywood, 2009), employment and the number of hours students are employed are likely to affect the time and number of opportunities students have to engage both socially and academically. Research has consistently found a negative relationship between employment and educational outcomes. Pascarella and Terenzini (2005) reported that the number of hours worked had a negative impact on virtually all institutional indicators for retention. Other educational outcomes have also been found to be negatively affected by employment status. Pike, Kuh, and Massa-McKinley (2008) found a statistically significant negative relationship between working over 20 hours a week and academic performance (grades). Astin (2005) also

studied the role of employment and controlled for student characteristics and social and academic integration. He found that working off-campus had a negative effect on grades and degree completion, while 20 hours or less per week on campus related positively to student outcomes. Student engagement has also been found to be affected by the number of hours students work. Furr and Elling (2000) found a significant relationship between hours worked and student participation in educationally purposeful activities.

Residential Status

The literature suggests that a key factor in student engagement is living arrangement, or whether students live on or off campus. Related to student engagement, Pascarella, Terenzini, and Blimling (1994) concluded, "residential living during college is consistently one of the most important determinants of a student's level of involvement" (p. 25) because students who live in residence halls are more likely to interact with peers and faculty, become involved in extra-curricular activities, and use campus facilities. Pascarella (1985a) also examined whether living on campus impacted college life using the outcome measures that included: interpersonal self-concept, academic integration, and social integration with peers and faculty, all of which are factors of student engagement. Using data from the Cooperative Institutional Research Program (CIRP) survey, he evaluated academic integration, social integration with peers, and social integration with faculty with living arrangement coded for each of the participants. He concluded that living on campus had a direct effect on social integration with both faculty and peers. However, there were no significant effects between living arrangement and academic integration or intellectual or interpersonal self-concept. Schudde (2011), whose study included all undergraduates found that students living on campus had more social support through relationships with faculty and peers, spent less time working off campus, and spent more time on

extra-curricular activities than commuter students. These are all behaviors that define student engagement. This research is consistent with that of Astin's (1996), who asserted that student peer groups were a power influence on involvement in the educational experience, and that it might explain why transfer students, many of whom traditionally live off campus, have lower levels of student engagement. Furthermore, in regard to living arrangement, Astin specifically named *living at home* and *commuting to campus* as negatively influencing the educational experience.

Empirical research has sought to identify demographic differences and differences in the college experiences of commuter and residential students. A single-institution study at Bridgewater State College, which enrolls a large number of transfer students, compared 190 commuter students to 190 residential students, in an effort to identify differences between residents and commuters. Based on an analysis of 2008 NSSE results, it was found that commuters worked more hours than residential students. In addition, commuters were found to spend more hours caring for dependents. Twenty-four percent of commuters work over 31 hours per week off campus, as compared to just 1% of resident students. Senior commuters were more likely to be enrolled part-time than resident seniors, 24% versus 3% respectively. In addition, the study found commuters to be older than residents, with only 23% of senior commuters falling between 20-23 years-old versus 95% of resident senior (Bridgewater State College, 2009). An important limitation to note is that this study gathered data from one college campus at one particular point in time. Nationally representative data would be more likely to reveal further differences between commuter and residential students that are relevant for students across institutional type.

Kuh, Gonyea, and Palmer (2001) looked at whether commuter students were less involved in academic life than students who lived on campus by examining the differences in characteristics of student engagement as measured by the NSSE. This study included data from first year and senior students, so the results should be taken with caution, as first-year students are not relevant for this study. The characteristics are defined as benchmarks of effective educational practices. The researchers found that students who resided on campus had the highest scores on all of the benchmarks and this suggests that these students were more engaged in campus life that commuter students. What these findings suggest is that the efforts put into residence hall programming by faculty and administrators could cause a positive effect and that one of the reason why transfer students may exhibit lower levels of student engagement is their living arrangement, since the commuter experience is a characteristic for many transfer students.

Participating in student groups, interacting with peers and faculty, studying in groups, and access to campus recourses all seem more easily accessible to students who live on campus. Even though a lot of campuses have made some efforts to integrate commuter students, most resources are not available to students with limited time on campus, which is a characteristic of a lot of transfer students (Porter, 1999). While most of the studies discussed in this section focused on students other than seniors, which is the key group of the present study, the literature provides insight on how residential status affects student engagement in more general terms.

Other Factors

In addition to the aforementioned student characteristics, the literature suggests that there may be other factors that affect student engagement. One of these factors is academic major. McArthur (2005) examined the effects of advising on student integration and persistence at one community college and found that students who were arts and humanities majors were more

integrated than the general student population. Furthermore, he concluded that arts and humanities majors were aware of advising, acknowledged faculty's efforts, and felt that faculty cared about their progress more than the general student population. Others (Brint, Cantwell, & Hanneman, 2007) also studied the impact of academic major on college experience and have identified two distinct cultures of student engagement. The culture of engagement in the arts, humanities, and social sciences focuses on interaction, participation, and interest in ideas, whereas the culture of engagement in the natural sciences and engineering focuses on improvement of quantitative skills through collaborative study with further focus on the labor market. What this line of research suggests is that academic major affects student engagement levels and differences in the education experience, and therefore more research is needed to study these differences.

There have been numerous studies on athletic status. Some concerns exist that participating in college athletics may lead to social isolation and lower engagement as student athletes may bond with each other but not with others (Wolf-Wendel, Toma, and Morpher, 2001). Despite this possible isolation, few studies have reported that student-athletes are often more satisfied and involved than their non-athletes (Astin, 1993; Pascarella & Smart, 1991) and yet others (Umbach, Palmer, Kuh, & Hannah 2006) found that student athletes do not differ greatly from their non-athlete peers in terms of their participation in effective educational practices and where differences exist, they favor athletes. Therefore, more research into athletic status as a predictor of student engagement is needed to determine the degree to which athletic status affects student engagement, if at all.

Institutional Characteristics

Several models for student outcomes have been developed and these models suggest that outcomes such as student engagement are affected by the human, social, and cultural capital that students bring with them at their point of entry into the institution, as well as their experiences on campus and aspects of the institution such as size and selectivity (Astin, 1993; Pascarella, 1985b; Perna, 2004; Porter, 2006).

Institutional Control, Classification, and Size

There has been much debate about whether the type and size of institution really matters for student engagement or whether student engagement is a factor of student behavior. One major study by Gonyea and Kuh (2006) looked at religious affiliation and found that religious affiliation explained the most variance in the following variables: participation in spiritual activities, gains in spiritual development, and gains in ethical development. Surprisingly, the same study found that students who were enrolled in other non-affiliated private institutions did not differ in any significant way from students enrolled at public institutions in terms of how often they engage in spiritual activities. However, differences were found to exist in terms of participating in spiritual activities, engaging in deep learning, and in self-reported growth in spirituality, ethical development, personal and social development, and social development and intellectual skills; with students at private institutions reporting higher levels of engagement than students at public institutions.

In terms of institutional size, it seems that large and small campuses employ different programs and policies to encourage student engagement and that smaller school generally engage students more effectively (Kuh, 2003). Most of these methods are naturally driven by the mission

of the university, with large campuses having complex missions and betting on structural activities, while on the other hand, small and private campuses emphasize values and philosophy as the driving force behind engagement opportunities. Aside from institutional practices, the literature remains unclear about how different the two types of institutions are in terms of fostering student engagement.

Review of the Literature: Engagement as the Outcome Variable

Because the present study investigated how transfer status affected student engagement, the engagement construct was the dependent variable. The theoretical overview and research discussed in this chapter suggests that there are certain student behaviors and institutional features that are powerful contributors to student learning and development. As a result of previous research on student engagement, the following variables were used to comprise the construct of student engagement, which also comprise the five NSSE benchmarks: Level of Academic Challenge (LAC), Active and Collaborative Learning (ACL), Student-Faculty Interaction (SFI), Enriching Educational Experiences (EEE), and Supportive Campus Environment (SCE).

The choice of student engagement as a dependent variable was based on other studies that used it as a dependent variable. For example, Galladia (2012) examined the five benchmarks of student engagement for commuter students enrolled at an urban public university and used student engagement benchmarks as her dependent variable. Her findings were that, when compared with first-year students, seniors at that institution found a more enriching educational experience at the institution which may have been a factor for persistence to the senior year. She also utilized student engagement benchmarks as the dependent variable and student characteristics as the independent variable in her study.

Johnson (2008) conducted a study based on the identification of NSSE socialization clusters that predicted private Midwestern college persistence. He utilized two of the NSSE benchmarks, student-faculty interaction and supportive campus environment as the dependent variable for engagement and looked at persistence, which was the independent variable of his study. Johnson found that student-faculty interaction was an indicator of persistence.

Lastly, O'Dair (2012) used the Masters Survey of Student Engagement (MSSE), the version of NSSE for Master's students and used student engagement as her dependent variable and student characteristics as the independent variable in her study. ODair's findings were that at least five dimensions of engagement for masters' student, three of these dimensions were more strongly associated with student characteristics, including academic discipline. Her study concluded that masters' students in business and education were more likely to experience a supportive campus environment than were students in arts and sciences.

Summary and Critique of Theories

The theoretical framework behind the student engagement construct has been developed over time and as a result of significant research on student development from the person-environment interactive theory we now have a more complete understanding of the benefits and importance of student engagement on student development. The departure and integration theory explain how the transfer process shapes the college experience for those students who transition from one institution to another and when student engagement is combined with transfer, literature and prior research highlight differences between the student groups.

This chapter reviewed the relevant theories behind the student engagement construct and highlighted not only how they informed student engagement, but also how it is relevant to the experience of transfer students. Pace (1980) and Astin (1993) both defined student engagement

as the product of student behavior, such as time and energy invested and quality of student effort. Pascarella (1987) emphasized the role of the environment in student development and Tinto's (1993) theory of integration and student departure informed the discussion of the transfer process.

There are common issues across person-environment interaction theories. One major problem in student engagement research has been the generalization to the student population in research. Student engagement has been shown to be an important part of student success for traditional students (Astin, 1984; Kuh et al. 2005; Pascarella & Terenzini, 2005), but its applicability to transfer students has not been evident. Astin's theory of student involvement and the importance that students are involved in academically purposeful activities and Tinto's theory of student integration (Tinto, 1993) are relevant to this study because Astin's theory explains student engagement and Tinto's seeks to explain transfer behavior. However, both theories generalize to the entire student population but fail to take into account the diversity of transfer types and background characteristics. Tinto's theory of social integration presents limitations for transfer students in general but especially for community college students, because it assumes that social integration generally takes place for everyone. In reality, lack of social integration is one of the main problems for community college students, who do not live on campus or spend much time there, as well as for transfer students who often leave their original institutions because of, among other reasons, a lack of integration.

Lastly, Pascarella's model for student change is useful due to its emphasis of the role of the environment. However, while it shows that structural characteristics affect student development, it does not address how specific aspects of these structures affect student development.

The theories discussed previously in this chapter are useful in defining student engagement and understanding transfer behavior and the role of the environment. However, these theories must be taken into consideration with caution as they tend to generalize and remain too broad to explain how individual characteristics and student sub-groups engage with their institutions.

Summary and Critique of Prior Research

Empirical research on transfer student engagement is inconsistent. While most studies suggest that native students have higher levels of engagement than transfer students, most of the research has focused on community college students only, who, if taken as a subset, have a different experience and a different set of challenges than students who begin their higher education at 4-year institutions. Furthermore, when the NSSE benchmarks are used for the analysis of student engagement, the benchmark comparison indicators are inconsistent across many studies. There have been no known studies that have looked at student engagement not only between native and transfer students, but within the transfer student population at a national scale. Despite the link between student engagement and academic performance, the diversity within the transfer population and lack of literature on the topic suggests the need for further research.

In terms of problems with some of the research available on the topic, some studies focus on special groups in the population, such as engagement defined by a sense of belonging for Latino students (Hurtado & Carter, 1997) for example. These studies have drawn attention to distinct subgroups of the student population and have highlighted nuances of the student experience. Studies focusing on the engagement level of transfer students, especially for

horizontal transfers, are very few. Most studies in that group have focused on the push-out factors behind the transfer and not the experiences of this group at the new institution.

Some research has also focused on what institutions can do to facilitate student engagement. Chickering and Gamson (1987) and Pascarella and Terenzini (2005) summarized research on which institutional practices were most meaningful to students. This line of thinking contributed to the creation of NSSE, which attempts to measure student change as a function of students' background characteristics, interactions with major socializing agents, and the quality of student effort in learning.

An important common critique of most empirical research available is that most studies focus on either one institution or a limited number of participants. Nationwide studies would likely reveal data that could be generalized to a wider segment of the student population. Longitudinal students would reveal how student development and engagement shape the college experience over time, rather than report on the variable at one point in time.

Proposed Framework

The research that has examined transfer student engagement is limited. The person-environment perspective informs the definition of student engagement and why it matters for student success. In addition, student integration theory highlights the importance of social and academic integration for student success. Ultimately, the theory suggests that engagement is the result of student behavior interacting with the environmental factors. Based on relevant theories and empirical research reviewed earlier, this study proposes a conceptual framework to examine the relationship between transfer status and student engagement. It incorporates what research suggests are important student and institutional factors for transfers and non-transfers. The

literature has revealed that some factors, such as gender, race/ethnicity, full or part-time status are considered significant in impacting student engagement for students.

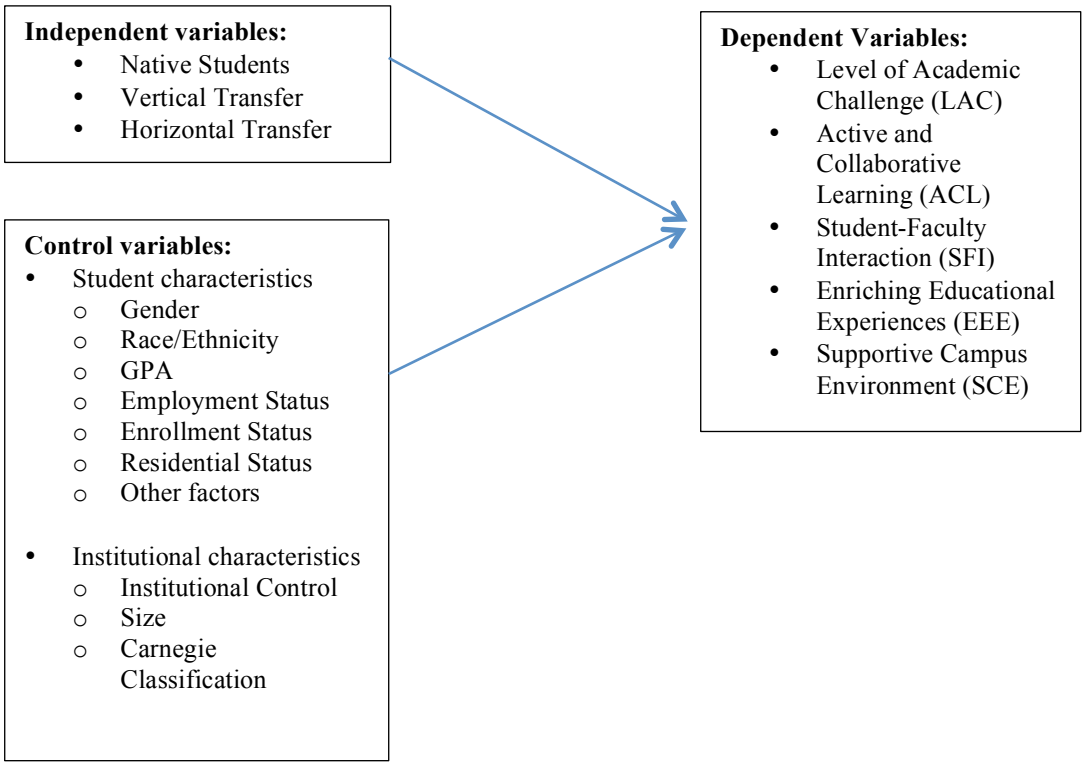

Figure 1. Concept map.

The relationship between the variables is shown in Figure 1. Based on the theory and research reviewed, this model proposes that transfer status affects student engagement. Not only are there differences in the engagement levels of transfers and native students, but there are differences by transfer type within the transfer population as well.

Conclusion

In sum, the literature and research reviewed in this chapter outlined student engagement theory and the determinants of student engagement among the student groups. Specifically, the literature indicates that, in addition to transfer status, other factors, including student characteristics and institutional characteristics, are related to student engagement. The availability of quality data, such as data collected by NSSE, have made it possible for hundreds of institutions to get to know their students, what they learn in college, and the programs and practices that make the most difference to the student educational experience. This is why the NSSE has become the most widely used measure of student engagement. In addition, the NSSE has allowed benchmarking among institutions seeking to improve educational outcomes. Most of the studies reviewed in this chapter used data from national surveys, such as the Cooperative Institutional Research Program (CIRP), and the National Survey on Student Engagement (NSSE) to perform qualitative and mixed methods studies and other relevant research methods.

The literature validates the importance of research on the topic and it demonstrates that more quality research is needed to understand and improve student outcomes and to highlight the differences in college experiences, especially within the transfer student population as the transfer population are either altogether omitted or only partially considered. The present study fills this void as it explored differences not only between native and transfer students, but also between horizontal and vertical transfers by comparing these groups across the five NSSE benchmarks.

Based on the review of the literature, there is a clear need to study the relationship between transfer status and student engagement as constructed by the five benchmarks (level of academic challenge; active and collaborative learning; student-faculty interaction, enriching

educational experiences, and supportive campus environment). While theories about student quality of effort, student involvement, student integration, and models of assessing students hold a valuable place in student development, the most appropriate theoretical framework will integrate these theories together. The findings of previous research suggest that differences between transfer and native students exist, but this research has failed to differentiate between the subgroups of transfer students.

Due to the vast numbers of transfer students in the United States, continued research and review of the literature pertaining to transfer students will provide a better understanding of the transfer experience. The academic integration of transfer students may have previously been among the most critical aspects of the transfer experience, as there has been a lot of research focused around transfer shock. Transfer students face a myriad of issues in their transition to the new academic environment, but transfer shock is only one of these challenges. Student engagement is a much more accurate predictor of student success and educational outcomes such as persistence and graduation. Student engagement encompasses both academic and social integration alike and it is rooted in the relationship between students and their environment. If college administrators and faculty do not create inclusive environments, if they do not provide programs and services that are distinct for non-transfers, horizontal and vertical transfers, students who lack these opportunities will likely dropout, as Tinto's student integration model suggests.

By integrating theories of quality of effort, student involvement, assessing student change and integration, the current study proposes to include individual and institutional characteristics to examine student engagement. Specifically, gender, race/ethnicity, enrollment status, residential status and other relevant factors as well institution size, classification and control will

also be included in analyzing the effects of transfer status on student engagement. In addition, this review suggests that transfer status may be important to be considered to predict student engagement levels and there may be differences in the college experience. This proposed model could be useful to institutions to better assess current practices for transfer students and focus their attention on this often overlooked big segment of the student population.

Chapter III

RESEARCH DESIGN

The purpose of this study was to investigate the relationship between transfer status and student engagement and, in addition, to find out whether transfer types were related to differences in engagement levels among transfer students. Furthermore, this study sought to understand the other factors, including student and institutional background characteristics, that were associated with student engagement levels. This chapter begins with an introduction of the research questions and the model that guided this study, the data source and sample used for this study are discussed, issues of validity and reliability are addressed and the major categories of research variables under study are outlined. In addition, the appropriate data analysis methods for analysis is reviewed and an overview of limitations is included at the end.

This study was guided by the following research questions:

1. Is transfer status related to student engagement levels in general?
2. If yes, does such relationship differ by transfer type (vertical, horizontal vs. native)? and
3. What other student characteristics are associated with student engagement?

Research Model

The conceptual framework that guided this study was presented in detail in Chapter II. It relied on the construct of student engagement, and it includes integrated theories of quality of effort (Pace 1979, 1984), involvement theory (Astin 1993), Pascarella's model for assessing student change (Pascarella 1985), and integration theory (Tinto 1987, 1993). Empirical research has suggested that there are certain factors that affect student engagement. The major variables included in this research are the independent variable of transfer status, which includes native

students, vertical transfer, and horizontal transfer; two types of control variables: student characteristics, which includes gender, race/ethnicity, residential status, enrollment status and other factors (major, athletic affiliation) and institutional characteristics, which includes institutional control, classification and size, and their relationship to the outcome variable for this study, student engagement, which was constructed of the five benchmarks that encompass the student engagement construct: level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment.

In sum, this research model was used to investigate how student transfer status, together with other factors, related to college student engagement.

Data Source

This study used data from the National Survey of Student Engagement (NSSE) dataset that was provided by the Indiana University Center for Postsecondary Research (see Appendix A for paper version of the survey also known as the "College Student Report"*)*. The purpose of NSSE is to provide a way for institutions to identify and measure aspects of the undergraduate experience inside and outside of the classroom that can be ameliorated through changes of practices consistent with identified good practices in undergraduate education (NSSE, 2015). In addition, the data provides information on how students spend their time at different colleges and what they gain from their experiences. In the last year, over 1.5 million students and 587 institutions participated in the 2015 version of the survey. No other college survey has reached this number of students, and this highlights the importance of this instrument for assessment purposes.

What makes the NSSE the most appropriate data for this study is that it is based on Chickering and Gamson's (1987) "Seven Principles of Good Practice in Undergraduate Education" and because the survey captures the effect the institution has on its students (Pascarella, Cruce, Umbach, Wolniack, Kuh, Carini, Haye, Gonyea, & Zhao, 2006). In addition to its extensive use, research has examined the association of NSSE benchmarks to student outcomes and has determined that there is a link between engagement measures and educational outcomes (Carini, Kuh, & Klein, 2006).

Sample

The sample used in this study came from the 2009 NSSE dataset. In 2009 about 1.1 million first-year and senior students from 622 institutions in the United States and Canada were invited to participate in the 2009 NSSE survey administration. Of this population, 367, 318 students responded and 65% of the participating institutions opted for the Web-only administration mode, and about 98% of all respondents completed the survey online and 52% of the respondents were seniors (NSSE, 2009a). In the 2009 NSSE administration, overall the institutions reflected the diversity of U.S. higher education with respect to institutional type, sector, region, and location (NSSE, 2009a).

The survey respondents included a large number of transfer students. About 42% of senior respondents began their higher education at an institution other than the one they were attending at the time of the survey administration. Among them, about half had previously attended another baccalaureate-granting institution, 70% had attended community college, 14% had attended a vocational-technical school, and 5% had enrolled in some other form of postsecondary educations (percentages add to over 100% because some respondents indicated they had attended more than one type of institution) (NSSE, 2009a).

Because the purpose of this study was to examine the relationship between transfer status and student engagement, this study only focused on respondents who were in their senior year of college, as they were getting ready to graduate. NSSE collects data from first-year and senior students. Focusing on data from students in their last year seemed to be the most appropriate for this study. It is important to note that this study was designed to focus on students who successfully transferred and were nearly ready to graduate. The focus on this group only was thought to provide more meaningful data on how the transfer process has affected their college experience since they have already spent some time in the institution.

This study uses a representative sample of the 2009 senior student participants (*n*=67, 362), which comprised 20% random sample of all collected responses that year and included 183 variables. The 2009 dataset was the largest data available for release to researchers up until the start of this study. After the data were sorted for senior students, the sample was comprised of 29,446 respondents. Missing data were removed using list-wise deletion and the sample contained 26,133 respondents who were used for the analysis of this study.

Validity and Reliability

Because of its popularity and common use in research, the NSSE instrument is often scrutinized for validity and reliability. As more institutions use the NSSE, the need to validate it becomes increasingly more important. Supported by research, NSSE is a valid measure of student engagement, and its benchmarks are indicators of student learning across institutions, regardless of type, classification, or population.

Due to the sophistication and research origin of the instrument, the NSSE relies on high content validity and reliability, continuously improved based on data collection (Kuh, 2009b). Crobach's alpha is used to measure internal consistency, as to how closely related a set items are

in a group, in this case, questions in single benchmark. For the 2009 NSSE data, the survey reported high levels of reliability, based on reported Cronbach' alpha, which for social science research generally means indicators of 70% or above (Cortina, 1993). In these data, the Crobach's alpha showed three of the benchmarks to contain a high degree of reliability for senior participants: level of academic challenge α=.76; student-faculty interaction α=.74 and supportive campus environment α=.80; and two of the benchmarks fell below α of .7 with active and collaborative learning score of α=.66 and Enriching Education Experiences score of α= .66 as well, meaning that results should be used with caution (NSSE, 2009a).

Research Variables

The research variables in this study are divided into three categories: dependent variables, independent variables, and control variables. These variables were derived from the literature review and the data available for this study.

Dependent Variables-NSSE Engagement Benchmarks

The five engagement benchmarks comprise the dependent variables in this study. Each one is a continuous variable, standardized for the purpose of this study. The variables are as follows:

Level of Academic Challenge (ACa), measuring the effect of coursework and time spent on reading and writing on cognitive development.

Active and Collaborative Learning (ACL), evaluating student involvement with various activities such as asking questions in class or taking advantage of tutoring sessions.

Student and Faculty Interaction (SFI), examining the frequency of discussing grades, assignments, and career plans with faculty and administrative staff.

Enriching Education Experiences (EEE), examining student participation with volunteer opportunities, study abroad and the like.

Supportive Campus Environment (SCE), examines the relationship with other students and faculty.

Each one of these benchmarks is composed to series of relevant questions, identified by research, as directly related to this measure. All questions for each benchmark can be found in Appendix B Description of NSSE Items.

Over time, the NSSE has established various scales including a set of questions in the survey. The most frequently reported are the five NSSE benchmarks: Level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment, (College Student Report, 2009 Codebook). Level of academic challenge is a benchmark of 11 items that measure time spent preparing for class, the amount of reading and writing, deep learning, and the institutional expectations for academic performance. The second benchmark, active and collaborative learning, is a seven-item benchmark that measures the extent of class participation, working collaboratively with other students in and out of the classroom, tutoring and involvement with a community-based project. The student-faculty interaction scale contains six items and measures the extent of interaction with faculty and advisors, discussing ideas from cases with faculty outside of class, getting prompt feedback on academic performance, and working with faculty on a research project. Enriching educational experiences is a benchmark that consists of 12 items that measure the extent of interaction among students of different racial and ethnic backgrounds or with different values or political opinions. Items here focus on information, technology, and participating in activities such as internships, community service, study abroad, and co-curricular activities. And

lastly, supportive campus environment consists of six items and is a scale measuring the extent to which students perceive the campus helps them succeeds academically and socially, assists them in coping with nonacademic responsibilities, and promotes supportive relations among students and their peers, faculty members, and administrative staff. The design of the survey was influenced by the seven principles of good practice in undergraduate education by Chickering and Gamson (1987).

Independent Variable: Transfer Status

In the analysis for the first and second research questions, data from question 21 on the survey was used, to classify transfer students into several transfer categories: Variable *votech05* with label Vocational or technical school, variable *comcol05* with label community or junior college, variable *fouryr05*, labeled 4-year college other than this one, *none05*, labeled None or *ocol1_05*, labeled Other are used in this analysis to classify respondents in one of several categories of transfer status:

Non-transfer or students who are native to an institution, those who start and finish at the same college or university are measured by the variable *none05*, with response values as 0=Checked and 1=Non-checked.

Horizontal transfer students who begin at one 4-year institution and transferred into another, or students who have had multiple transfers but ultimately arrived from one 4-year institution into another are measured by the variable fouryr05 with response values as 0=Checked and 1=Non-checked.

Vertical transfers students who start at a community college or a vocational school before transferring into a 4-year institution are measured by the variables *votech05* and *comcol05* with response values as 0=Checked and 1=Non-checked.

Control Variables

This study included and controlled for the following variables:

Student characteristics.

- Gender. Item 16 on the survey, this variable is named as *sex*, to reflect a student's gender; with response values of 0=Male and 1=Female.
- Item 17 on the survey, named as race05 asks about the respondent's race/ethnicity. The item is, "What is your racial or ethnic identification (select only one)", with categories of American Indian or other Native American, Asian, Asian American or Pacific Islander, Black or African American, White (non-Hispanic), Mexican or Mexican American, Puerto Rican, Other Hispanic or Latino, Multiracial, Other, and I prefer not to respond. In the present study, Race/Ethnicity is recoded into dummy variables measuring student race/ethnicity. White students were treated as the reference group, and Latino and Hispanic categories were combined into one ethnic group and the group of student that preferred not to respond were treated as missing data.
- GPA-Item 27 on the survey, named as grades04, asks "What have most of your grades been up to now at this institution?". In this study, this variable is recoded into three dummy variables, instead of using the original 8 categories, ranging from C- to A, into three groups only measuring A- or higher is treated as the reference group, with variables such as A to A- as topgpa, B+ to B- as medgpa and C+ to C- as lowgpa in order to decrease the number of original variables and facilitate use.
- Employment status, item 9 on the survey, named as workon01 for hours per 7-day week spent working for pay on campus and named as workof01 for hours per 7-day week spent

working for pay off campus. These variables were recoded into dummy variables in this study to measure the hours of employment per week.

- Enrollment status, part-time or full-time, was assessed by item 22 with variable named as enrlment indicating "Thinking about this current academic term… How would you characterize your enrollment?" with response values for this variable being, 0=less than full time and 1=full-time.
- Residential status (on campus or commuter). This variable is assessed by item 26 in the survey, named livenow, asked, "Which of the following best describes where you are living now while attending college?". In this study, it is recoded into dummy variables measuring residential status. On-campus was treated as the reference group.
- Other characteristics. Major and athletic affiliation were examined to see if they had an effect on the level of engagement between student groups. Academic major is assessed by item 28a named majprim that asked, "Please enter your major(s) or your expected major(s). Primary major (Enter only one)," with arts and humanities as the reference group. Athletic affiliation is assessed by item 24a, named *athlete*, with response values 0=No; 1=Yes.

Institutional characteristics.

The institutional characteristics were based on the 2005 Carnegie classifications, since these were in place at the time of data collection.

Institutional control referred to whether the institution attended was public or private. The variable name is PRIVATE with values 0=public and 1=private.

Classification referred to the type of institution, and it is named Rec_enrl_tds. It was recoded into dummy variables that assessed the classification of each institution. Research university (very high research activity), was treated as the reference group. Size referred to the size of undergraduate enrollment and, in this study, this variable was named Rec_enrl_tds, and it was also recoded into dummy variables, with fewer than 1,500 students as the reference group. The original categories of this variable were 1=Fewer than 1,500, 2=1,500 to 2,499, 3=2,500 to 4,999, 4=5,000 to 9,999, and 5=10,000 or more and were recoded to *inst_small* to refer to institutions with enrollments up to 2,499 students, *inst_medium* referred to institutions with enrollments between 2,500 and 9,999 students, and *inst_large* was used to refer to institutions with enrollments of 10,000 or more students.

Data Analysis

Multiple regression was chosen as an appropriate statistical method for this study due to the continuous nature of the outcome variables. The statistical equation can be represented as follows: $Y=b_1 X_1+b_2X_2+b_3X_3+...+e$. In this equation, the *b* represents the regression coefficients for the respective predictor variables (*X*) and *e* is the error term. The standard errors at the institution level were clustered in order to account for students clustered within colleges. Because transfer status was self-reported, there were no concerns about error for this variable. Furthermore, in order to address error in the self-reported data on transfer status, it was believed to be unlikely that respondents would lie about demographics and their transfer status, so it was assumed that there were no major concerns about errors in self-reported transfer status.

The following steps were taken before the actual inferential analysis was performed. In order to select the appropriate data sample, SPSS was used to identify the student cases that

reported a class rank of senior. This step was necessary to determine whether transfer status was related to student engagement levels in general for all senior students. Because this study sought to examine the impact of transfer status on student engagement and sought to compare transfers to non-transfers, the use of data from senior students provided the most valuable information, as senior students had spent the longest time at their respective institutions. After data were filtered for seniors, a list-wise deletion was used to deal with missing data cases. This method was used in the study due of the large number of available cases and relatively low number of missing cases. Three thousand, three hundred and thirteen cases were removed because of missing data. This left a sample of 23,166 cases to be used for analysis. Necessary recoding of any variables took place so that descriptive and inferential statistics could be conducted. Lastly, clustered data was incorporated in the analysis because respondents were nested within a type of institution at the time that the data was provided. There is an institutional indicator present in the dataset and so cluster-correlated data arise when there is a grouped structure to the data.

The NSSE generally provides the option to weight the data when two conditions are present: (a) the proportion of respondents within a particular demographic variable differs substantially from their population percentages, and (b) students within the subgroups differ substantially in the variables of interests. These conditions require NSSE to weight by gender, enrollment status, and institutional size (NSSE, 2016). While weighting is generally used by individual institutions to adjust their data for underrepresented populations, weighting was not used in the present study because it was not appropriate to use for student subgroups. Since this study used data from senior respondents only, which consisted of 20% of all respondents, the data was not weighted. The weights used by the NSSE should only be used if the proportion of seniors by gender, ethnicity and enrollment status is the same as in the full sample of senior

respondents. Otherwise, the weighted sample is not representative of the population. Given that I did not have access to all seniors who took the NSSE 2009 survey, it is unlikely that the subsample is representative of respondents.

This study used both descriptive statistics and a one-way ANOVA to describe and analyze characteristics of the sample. To answer the research questions, a multiple regression was performed in order to examine the relationship between transfer status, a set of control variables, and student engagement. To answer the first and third research questions, multiple regression models were run on the whole sample to understand the relationship between transfer status and student engagement. For the second research question, a multiple regression was conducted on the transfer student sample only to understand how transfer types may relate to student engagement.

Limitations

As with all surveys, the NSSE relies on students to self-report information about their educational experiences. Even though this may be an effective way to understand student engagement, there are several limitations to the use of the NSSE, such as relying on self-reported data, problems with cross-sectional analysis, and potentially older data.

The first limitation of this study is that it relied on self-reported student data. There are a several general problems associated with surveys. The first is the inability of respondents to provide accurate information in response to a single question (Wentland & Smith, 1993). In the case of the present study, the respondents might not have had enough experience with the institution to be able to accurately answer the questions at hand. Another problem with self-reporting in surveys is the possible unwillingness of the respondents to provide truthful information (Aaker, Kumar, & Day, 1998). This means that students may intentionally provide

false data about their experiences or characteristics. However, research has discovered that people generally tend to respond accurately when questioned about their experiences or past behavior, except when asked uncomfortable questions or asked to reveal information which may put them in potentially awkward position (Bradburn & Sudman, 1998). Lastly, student self-reports are also subject to the halo effect, meaning that some students may inflate certain aspects of experience or behavior, such as grades, outcome gains, and the level of effort. The halo effect does not seem to be a factor for a particular type of institution, but research has shown that it is rather constant across different institutional types (Pike, 1999). However, research has also shown that self-reports tend to be valid under five distinct conditions: (a) when the information requested is known to the respondents; (b) the questions are structured clearly; (c) the questions refer to recent activities; (d) the respondents think that the questions merit a serious and thoughtful response; and (e) answering the questions does not threaten, embarrass, or raise privacy issues (Bradburn & Sudman, 1988). The NSSE was intentionally designed to satisfy all of these conditions (Kuh, 2001b). In addition, there is no indication that transfer students may answer items on the survey with any more or less error than native students Therefore, the response error does not raise concerns.

The second limitation of this study is the use of cross-sectional analysis. This presents a limitation for this study because data from a single year only was used in analysis of student engagement, while learning and development actually occur over time. Using cross-sectional data is challenging because this way student engagement scores are not necessarily expected to grow over time, but it is estimated that in the context of their current setting and courses they have taken up to this point (Chen et. al. 2009). A recommendation for further research is the use of multi-year data analysis of student engagement in order to ameliorate this problem.

The third limitation of this study is its design. Because this study focused on students who successfully transferred and were nearly ready to graduate when the data was collected, it focused on student engagement after a successful transfer and does not examine the factors that contributed to the transfer. Future studies need to examine this population.

The fourth limitation of this study is that it did not address the type of institution from which the transfers originated. The data only includes information about the institutional characteristics of the host institutions. A more thorough study could examine whether there is an alignment or not between original and host institutions and how institutional types affect fit. This is particularly important for transfer students, since lack of fit with the host institution is one of the challenges leading to transfer shock and lack of persistence and may also impact engagement.

The fifth limitation of using NSSE data is that participation in the survey is voluntary, and institutions report their data rather than the data being selected randomly from all eligible institutions. Given this self-selection bias, it is important to compare the institutional characteristics of NSSE schools to all other post-baccalaureate institutions in the United States. Perhaps future research will evaluate institutional characteristics. If institutions that choose to participate in NSSE have similar institutional characteristics and constitute a nationally representative sample, then there is a lower chance of self-selection bias influencing NSSE results.

The sixth limitation of this study is use of data from 2009, as more recent data was available at the time of this writing. While the NSSE continues to grow and engage more students and institutions across the United States and Canada, the data for the present study comes from the 2009 edition of the survey. I acquired the data in 2012, and at that time (the start

of this study) it was the most recent data available to any researcher. Future research could use more recent data and compare it with what has been found in the current study. If similar studies using more recent data are conducted, then a comparison with this study could reveal whether there has been a change in the results or not. In addition, the NSSE 2009 results are likely to have been administered right before the effects of the recession crisis the country faced were fully felt. Therefore, results from this particular point in time will be useful in examining how the financial crisis of 2008 impacted college students.

CHAPTER IV

RESULTS

As outlined in Chapter III, the research questions for this study ask about the relationship between student engagement and transfer status. The results presented in this chapter are separated into two sections. The first section outlines the descriptive statistics of the sample for each variable used in this study. The second section presents the findings of the multiple regression analysis for each of the variables that were significantly related to the dependent variable.

Descriptive Statistics

Table 1 presents the student characteristics of the sample. All of the data is self-reported student data from the 2009 NSSE survey. Information included in Table 1 includes gender, race and ethnicity, transfer status, type of transfer, enrollment status, GPA, primary major, living arrangement, athletic affiliation, and on and off campus employment. The data also include information about institutions, such as institutional control, IPEDS, and Carnegie classifications. After the data were cleaned and filtered for senior respondents and the missing data were eliminated, the sample contained 26,133 respondents.

Table 1 shows that the majority of the sample was female (64.5%). White students were the majority of respondents, 75.8% of all survey takers, while 7.8%of the respondents were Black, 5.4% reported that they were Asian students represent, less than 1% of the sample reported that they were Native American, and 6.2% of the sample reported that they were Hispanic/Latino. Students who did not provide ethnic/race information were treated as missing

data and were excluded from the analysis. Five and two-tenths percent of the original dataset, which included first-year and senior students, fell into this category and 6.3% of the senior subset of the population selected, I prefer not to respond.

The majority of students included in this sample were transfers, 53.2%, while 46.8% identified as non-transfer students. Among the transfer population, 28.4% were vertical transfers, while 24.8% were horizontal, leaving 48.6% as native students in the sample, referred to as *non-transfers* in this study. These descriptive statistics were relatively evenly distributed between student types.

Other demographic statistics also highlight the population of the sample. The vast majority of respondents as a whole, or 86.3%, were enrolled full-time and 13.7% were enrolled on part-time basis. As a group, the respondents reported relatively high GPA in grade equivalency: 48.7% having mostly grades falling between A- and A, 45.8% reporting grades between B+ and B- and only 5.6% reporting grades C+ or below. The distribution of the respondents' primary major indicated that 28% majored in one of the social sciences, 19. 1% majored in business, 13.8% majored in the arts and humanities, and 10.2% majored in education; 9.1% majored in professional majors: 7.3% majored in biological sciences, 5.5% majored in engineering; 3.8% had declared majors that did not fall within any of the NSSE categories, and 3.2% majored in the physical sciences. Student athletes comprised only 6.6% of the respondents, while 93.4% were not affiliated with any athletic team on campus.

Students who lived on-campus in either dorms or residence halls comprised 16.1% of the sample, while 22.6% lived within walking distance of their campus. Over half of all respondents, 53.8%, lived within driving distance of campus. One and a half percent lived in sorority or fraternity houses, and 6% of the sample indicated they had some other living

arrangement. Lastly, when it came to student employment either on or off campus, the distribution was the following: students who did not work on campus comprised 70.4% of the sample, 26.2% reported working under 20 hours per week on campus, and 3.4% of students reported working over 21 hours on campus. In the off-campus employment group, 43.2% of students reported that they did not work off campus, 27.4% reported that they worked under 20 hours a week off campus, and 29.4% reported that they worked over 21 hours a week at an off-campus job. This distribution shows that the number of respondents who worked over 21 hours a week off campus is a significant portion of all of the students who were employed off-campus while, in comparison, only 3.4% of students held on-campus jobs.

Also, the descriptive statistics presented in Table 1 show the distribution of students based on their home institutions. Twenty-one percent of respondents attended small institutions, with a size of less up to 2,499 students, 39.4% attended institutions with enrollments between 2,500 and 9,999 students, and 39.6% of respondents attended institutions with enrollments of 10,000 or more students. The majority of respondents attended public institutions, 57.8% of the sample, while the remainder, 42.2%, attended private colleges or universities.

Cross-tabulation analysis revealed that the samples were very similar across gender, race, and GPA, see Table 2. For native students, 93.7% indicated that they were enrolled on full-time basis, while horizontal and vertical transfer students were at 79.9% and 79.8% respectively.

Table 1

Descriptive Statistics of the Independent Variables (N=26,133)

Variables		Frequency (%)
Gender		
	Female	64.5
	Male	35.5
Race and Ethnicity		
	American Indian or other Native American	0.9
	Asian/Pacific Islander	5.4
	Black/African American	7.8
	Hispanic/Latino	6.2
	White (reference group)	75.8
	Other	4
Transfer Status		
	Non-transfer	46.8
	Transfer	53.2
Type of Transfer		
	Native	46.8
	Horizontal	24.8
	Vertical	28.4
Enrollment Status		
	Full-time	86.3
	Part-time	13.7
GPA		
	Top (A- through A) (reference group)	48.7
	Medium (B- through B+)	45.8
	Low (C- through C+)	5.6
Primary Major		
	Arts and Humanities (reference group)	13.8
	Biological Sciences	7.3
	Business	19.1

Variables		Frequency (%)
	Education	10.2
	Engineering	5.5
	Physical Sciences	3.2
	Professional	9.1
	Social Sciences	28
	Other (includes those who responded undecided)	3.9
Living Arrangement		
	On campus (reference group)	16.1
	Walking dist	22.6
	Driving dist	53.8
	Sorority/Fraternity house	1.5
	Off campus	6
Athletic Affiliation		
	Athlete	6.6
	Not athlete	93.4
On-Campus Employment		
	Not working on campus (reference group)	70.4
	Working up to 20 hours a week	26.2
	Working over 21 hours a week	3.4
Off-Campus Employment		
	Not working off campus (reference group)	43.2
	Working up to 20 hours a week	26.2
	Working over 20 hours a week	3.4
Institutional Size		
	Small (2,499 students or fewer)	21
	Medium (between 2,500 and 9,999 students)	39.4
	Large (10,000 or more students)	39.6

Variables		Frequency (%)
Institutional Control		
	Public (reference group)	57.8
	Private	
Carnegie Classification		
	Research Institution	37.6
	Master's Institution	42.6
	Baccalaureate Institution	19.8

Table 2

Descriptive Statistics by Classification

Variables	Frequency			
Gender	Female	Male		
Horizontal	64.40%	35.40%		
Vertical	66.00%	34.00%		
Native	63.60%	34.60%		
Race				
	White	Black	Asian	Native American
Horizontal	73.60%	9.90%	5.60%	1.10%
Vertical	69.50%	9.80%	5.20%	1.30%
Native	80.70%	5.50%	5.30%	0.50%
	Hispanic	Other		

	Horizontal	5.70%	4.20%	
	Vertical	9.20%	4.90%	
	Native	4.60%	3.30%	
Full-time Enrollment Status				
	Horizontal	79.90%		
	Vertical	79.80%		
	Native	93.70%		
GPA		Top	Medium	Low
	Horizontal	52.50%	42.60%	5.00%
	Vertical	46.40%	46.40%	7.30%
	Native	48.10%	47.10%	4.80%

Research Question 1

Is transfer status related to student engagement levels in general?

The t-tests examined the following hypotheses:

H_1 There are differences between the means of transfer status by student engagement benchmark.

H_0 There are no differences between the means of transfer status by student engagement benchmark.

T- tests were used in order to obtain descriptive statistics for independent samples, which compared the means for each outcome variable between transfers and native students. Tables 3 and 4 present the results from this analysis.

Table 3

Group Statistics Comparing Student Engagement Across Benchmarks for Transfers and Native Students.

		N	Mean	Std. Deviation	Std. Error Mean
ACa	not transfers	12227	57.95	13.67	0.12368
	transfers	13906	57.88	14.17	0.12016
ACL	not transfers	12227	52.82	16.18	0.14632
	transfers	13906	51.44	17.29	0.14659
SFI	not transfers	12227	46.07	21.08	0.19072
	transfers	13906	41.22	20.29	0.17207
EEE	not transfers	12227	47.47	17.34	0.15681
	transfers	13906	38.67	17.8	0.15094
SCE	not transfers	12227	61.33	18.16	0.1642
	transfers	13906	59.07	19.64	0.16652

Table 4

Independent Samples Test for Transfers and Non-transfers Across the Engagement Benchmarks.

		Independent Samples T-test						
		Levene's Test for Equality of Variances		T-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ACa	Equal variances assumed	15.941	0	0.428	26131	0.668	0.07	0.173
	Equal variances not assumed			0.429	25905.6	0.668	0.07	0.172
ACL	Equal variances assumed	55.361	0	6.634	26131	0	1.38	0.208
	Equal variances not assumed			6.662	26029.1	0	1.38	0.207
SFI	Equal variances assumed	28.001	0	18.898	26131	0	4.84	0.256
	Equal variances not assumed			18.852	25420.7	0	4.84	0.257
EEE	Equal variances assumed	11.569	0.001	40.381	26131	0	8.8	0.218
	Equal variances not assumed			40.449	25859	0	8.8	0.218
SCE	Equal variances assumed	77.402	0	9.609	26131	0	2.26	0.235
	Equal variances not assumed			9.657	26064.9	0	2.26	0.234

The differences within the student groups were determined using one-way analysis of variances (ANOVA) tests. Table 5 presents the results from this analysis.

Table 5

One-way ANOVA Descriptive Statistics of Transfer Status and Student Engagement by Benchmark

Variables		*N*	Mean	St. Dev.	St. Err.	Min	Max
ACa							
	Horizontal Transfers	6,477	57.96	14.26	0.177	0	100
	Vertical Transfers	7,429	57.81	14.09	0.163	5.84	100
	Native Students	12,227	59.95	13.67	0.124	2.27	100
	Total	26,133	57.91	13.94	0.086	0	100
ACL							
	Horizontal Transfers	6,477	51.05	17.57	0.218	0	100
	Vertical Transfers	7,429	51.78	17.02	0.197	0	100
	Native Students	12,227	52.82	16.18	0.146	0	100
	Total	26,133	52.08	16.79	0.104	0	100
SFI							
	Horizontal Transfers	6,477	41.33	20.57	0.256	0	100
	Vertical Transfers	7,429	41.12	20.04	0.232	0	100
	Native Students	12,227	46.06	21.08	0.191	0	100
	Total	26,133	43.48	20.81	0.129	0	100
EEE							
	Horizontal Transfers	6,477	39.3	17.98	0.223	0	100
	Vertical Transfers	7,429	38.12	17.62	0.204	0	100
	Native Students	12,227	47.47	17.34	0.157	0	100
	Total	26,133	42.79	18.12	0.112	0	100
SCE							
	Horizontal Transfers	6,477	58.33	19.69	0.245	0	100

Variables		*N*	Mean	St. Dev.	St. Err.	Min	Max
	Vertical Transfers	7,429	59.72	19.57	0.227	0	100
	Native Students	12,227	61.33	18.16	0.164	0	100
	Total	26,133	60.13	18.99	0.117	0	100

Table 6 shows the output from the ANOVA analysis that tested whether there were statistically significant differences between the group means. The results show that there were statistically significant differences between the group means for all benchmarks except academic challenge.

The significance level for all benchmarks except Academic challenge was less than 0.001, therefore there is a statistically significant difference between the means for transfer status for each benchmark of student engagement. In order to know which of the specific groups differed, a post-hoc tests was completed that offered multiple comparisons. Academic challenge was excluded from analysis (see Table 6).

Table 6

One-Way ANOVA Table for Transfer Status and Student Engagement

		Sum of Squares	*df*	Mean Square	*F*	Sig.
ACa						
	Between Groups	119.06	2	59.53	0.306	0.736
	Within Groups	5078190	26130	194.343		
	Total	5078309				
ACL						
	Between Groups	14223.18	2	7111.59	25.269	***
	Within Groups	7353775	26130	281.43		
	Total	5078309				
SFI						

		Sum of Squares	*df*	Mean Square	*F*	Sig.
	Between Groups	152715.3	2	76357.6	178.751	***
	Within Groups	11162018	26130	427.173		
	Total	11314733				
EEE						
	Between Groups	509086.6	2	254543	823.525	***
	Within Groups	8076517	26130	309.09		
	Total	8585603				
SCE						
	Between Groups	39861.8	2	19930.9	55.487	***
	Within Groups	938544.1	26130	359.198		
	Total	9425706				

Note: Significance $p<0.001$ ***

The results so far illustrate that there are significant differences between the transfer status groups for each benchmark at the .05 significance level except academic challenge, which is excluded here because of being not significant different, as previously demonstrated. Table 7 shows which groups are different from each other. The Tukey post-hoc test is used here to find out which group means differ. The results presented on Table 7 show that there are significant differences between all of the means across the groups in each benchmark, except under the student-faculty interaction benchmark between the horizontal and vertical transfer students groups (p=.820).

Table 7

Post-Hoc Test for Transfer Status by Student Engagement Benchmark

	(I) classification	(J) classification	(I-J)	Std. Error	Sig.
ACL					
	vertical	horizontal	.728*	0.285	0.029
	native	horizontal	1.769*	0.258	0
		vertical	1.04*	0.247	0
SFI					
	vertical	horizontal	-0.2108	0.351	0.82
	native	horizontal	4.73*	0.318	0
		vertical	4.94*	0.304	0
EEE					
	vertical	horizontal	-1.179*	0.299	0
	native	horizontal	8.174*	0.27	0
		vertical	9.352*	0.259	0
SCE					
	vertical	horizontal	1.389*	0.322	0
	native	horizontal	3.00*	0.291	0
		vertical	1.612*	0.279	0

* The mean difference is significant at the 0.05 level.

In conclusion, there are significant differences between the transfer groups as determined by one-way ANOVA for the ACL benchmark (F=25.269, p<.001), the SFI benchmark (F=178.75, p<.001), the EEE benchmark (F=823.525, p<.001), and the SCE benchmark (F=55.487, p<.001), but the results did not demonstrate a significant differences between the transfer groups for the ACa benchmark (F=.306, p<.05). The Tukey post-hoc test revealed that the scores for active and collaborative learning were higher and statistically significant for native students compared to horizontal and vertical students (p<.05), the horizontal transfers scored

significantly lower on this benchmark when compared to vertical transfers ($p<.05$). For the student-faculty interaction benchmark, the ANOVA post-hoc revealed similar results. Native students scored higher than the two transfer groups ($p<0.001$). However, there were no statistically significant differences between the horizontal and vertical transfers for this benchmark ($p>.05$).

The results for the remainder of the student engagement benchmarks, the enriching educational experiences and supportive campus environment, also showed that native students scored higher in each benchmark as compared to any one of the two transfer groups ($p<.001$). This indicated that across all benchmark native students were more engaged in their education and with their campus, than transfer students.

Multiple Regression

In order to determine the relationship between transfer status and student engagement benchmarks and the impact of any other variables, such as student characteristics or institutional factors, standard multiple regression was conducted to address each one of the research questions due to the continuous nature of the each one of the student engagement benchmarks except academic challenge (ACa).

The results of the first multiple regression analysis showed that a significant relationship existed between transfer status and student engagement benchmarks. Table 8 presents the results for transfer status by benchmark.

Table 8

Regression Analysis Summary for Student Engagement by Benchmark for Transfer Status

Model		*B*	Std. Error	Sig.
ACa				
	transfer or not	0.496	0.186	**
	Black or not	1.651	0.324	***
	Asian or not	0.212	0.38	
	Native American or not	1.749	0.899	
	Hispanic or not	2.161	0.356	***
	other or not	1.888	0.434	***
	female or not	1.943	0.185	***
	medgpa or not	-1.528	0.177	***
	lowgpa or not	-4.981	0.384	***
	work under 20 hours on campus	0.661	0.214	**
	work over 20 hours on campus	2.049	0.473	***
	work under 20 hours off campus	0.512	0.211	*
	work over 20 hours off campus	0.913	0.235	***
	fulltime or not	4.42	0.262	***
	on campus or not	-0.641	0.273	*
	walkdist or not	0.349	0.229	
	greek or not	1.134	0.701	
	liveother or not	2.386	0.371	***

Model		*B*	Std. Error	Sig.
	athlete or not	-0.51	0.351	
	artshum or not	1.296	0.278	***
	biosci or not	-0.312	0.353	
	business or not	-0.704	0.253	**
	education or not	0.554	0.315	
	engin or not	1.457	0.404	***
	physci or not	-1.747	0.501	***
	profes or not	2.701	0.325	***
	othrmaj or not	-0.136	0.463	
	masters or not	0.249	0.214	
	baccalaureate or not	1.594	0.304	***
	small or not	0.338	0.329	
	medium or not	0.22	0.22	
	IPEDS08: CONTROL	2.608	0.215	***
LAC				
	transfer or not	-0.34	0.22	
	Black or not	3.897	0.382	***
	Asian or not	-1.329	0.449	**
	Native American or not	1.172	1.062	
	Hispanic or not	2.881	0.42	***
	other or not	2.437	0.513	***
	female or not	0.447	0.218	*
	medgpa or not	-2.911	0.209	***
	lowgpa or not	-7.694	0.454	***
	work under 20 hours on campus	3.987	0.252	***

Model		*B*	Std. Error	Sig.
	work over 20 hours on campus	5.956	0.558	***
	work under 20 hours off campus	2.029	0.249	***
	work over 20 hours off campus	1.666	0.277	***
	fulltime or not	5.341	0.309	***
	on campus or not	-0.855	0.323	**
	walkdist or not	0.826	0.27	**
	greek or not	1.091	0.828	
	liveother or not	-4.107	0.439	***
	athlete or not	0.697	0.415	
	artshum or not	-0.942	0.329	**
	biosci or not	-0.79	0.417	
	business or not	2.904	0.299	***
	education or not	7.325	0.373	***
	engin or not	2.454	0.477	***
	physci or not	-1.147	0.592	
	profes or not	4.347	0.383	***
	othrmaj or not	1.621	0.547	**
	masters or not	1.439	0.253	***
	baccalaureate or not	1.413	0.359	***
	small or not	2.549	0.389	***
	medium or not	1.383	0.26	***
	IPEDS08: CONTROL	0.606	0.254	*

SFI

Model		*B*	Std. Error	Sig.
	transfer or not	-1.759	0.27	***
	Black or not	4.179	0.47	***
	Asian or not	-0.71	0.552	
	Native American or not	2.449	1.304	
	Hispanic or not	2.137	0.516	***
	other or not	2.152	0.63	**
	female or not	-0.67	0.268	*
	medgpa or not	-3.619	0.256	***
	lowgpa or not	-8.682	0.557	***
	work under 20 hours on campus	6.788	0.31	***
	work over 20 hours on campus	8.792	0.686	***
	work under 20 hours off campus	2.247	0.306	***
	work over 20 hours off campus	0.439	0.341	
	fulltime or not	5.56	0.38	***
	on campus or not	1.064	0.396	**
	walkdist or not	1.611	0.332	***
	greek or not	3.667	1.017	***
	liveother or not	-1.49	0.539	**
	athlete or not	1.18	0.509	*
	artshum or not	0.56	0.404	
	biosci or not	3.948	0.512	***
	business or	-3.701	0.367	***

Model		*B*	Std. Error	Sig.
	not			
	education or not	0.932	0.458	*
	engin or not	-1.541	0.586	**
	physci or not	3.209	0.727	***
	profes or not	1.409	0.471	**
	othrmaj or not	-1.769	0.672	**
	masters or not	1.479	0.311	***
	baccalaureate or not	2.986	0.441	***
	small or not	4.223	0.477	***
	medium or not	2.475	0.319	***
	IPEDS08: CONTROL	-0.205	0.311	
EEE				
	transfer or not	-4.415	0.227	***
	Black or not	1.069	0.394	**
	Asian or not	0.275	0.463	
	Native American or not	-0.547	1.094	
	Hispanic or not	1.785	0.433	***
	other or not	3.384	0.528	***
	female or not	2.001	0.225	***
	medgpa or not	-2.932	0.215	***
	lowgpa or not	-7.822	0.467	***
	work under 20 hours on campus	4.45	0.26	***
	work over 20 hours on campus	5.907	0.575	***

Model		*B*	Std. Error	Sig.
	work under 20 hours off campus	1.686	0.256	***
	work over 20 hours off campus	-0.393	0.286	
	fulltime or not	5.324	0.318	***
	on campus or not	4.162	0.332	***
	walkdist or not	4.029	0.278	***
	greek or not	8.836	0.853	***
	liveother or not	-2.629	0.452	***
	athlete or not	3.379	0.427	***
	artshum or not	-0.391	0.339	
	biosci or not	0.293	0.429	
	business or not	-2.944	0.308	***
	education or not	-0.033	0.384	
	engin or not	-1.769	0.491	***
	physci or not	-2.974	0.61	***
	profes or not	-0.47	0.395	
	othrmaj or not	-1.485	0.564	**
	masters or not	-2.036	0.261	***
	baccalaureate or not	-0.458	0.37	
	small or not	1.377	0.4	**
	medium or not	0.37	0.267	
	IPEDS08: CONTROL	3.272	0.261	***
SCE				
	transfer or not	-1.247	0.254	***
	Black or not	2.985	0.441	***

Model		*B*	Std. Error	Sig.
	Asian or not	0.32	0.519	
	Native American or not	1.017	1.225	
	Hispanic or not	3.969	0.485	***
	other or not	-0.843	0.592	
	female or not	0.403	0.252	
	medgpa or not	-2.348	0.241	***
	lowgpa or not	-7.029	0.523	***
	work under 20 hours on campus	2.783	0.291	***
	work over 20 hours on campus	3.605	0.644	***
	work under 20 hours off campus	0.238	0.287	
	work over 20 hours off campus	-1.044	0.32	**
	fulltime or not	1.305	0.357	***
	on campus or not	0.594	0.372	
	walkdist or not	0.813	0.312	**
	greek or not	0.518	0.955	
	liveother or not	1.749	0.506	**
	athlete or not	1.378	0.479	**
	artshum or not	-0.971	0.379	*
	biosci or not	-0.552	0.481	
	business or not	1.353	0.345	***
	education or not	2.457	0.43	***

Model		*B*	Std. Error	Sig.
	engin or not	-1.452	0.551	**
	physci or not	-1.281	0.683	
	profes or not	0.17	0.442	
	othrmaj or not	1.468	0.631	*
	masters or not	3.062	0.292	***
	baccalaureate or not	3.468	0.414	***
	small or not	1.127	0.449	*
	medium or not	0.44	0.3	
	IPEDS08: CONTROL	2.406	0.293	***

Note: Significance: *** p<.001; **p<.01; *p<.05

The results (see Table 8) indicate that there are statistically significant differences between transfers and native students in most benchmarks. For example, for academic challenge and controlling for all variables except transfer status, the adjusted *R* square=.051, which indicates that 5.1% of the variance in ACa was explained by the model. The unstandardized coefficients, *B*=.496 and *p*<.01 indicating that transfer students score 0.496 points higher than non-transfer students.

For the active and collaborative learning, the results were found to be quite different. The analysis showed-no statistically significant differences between transfer students and those who did not transfer on this benchmark *(B*= -.34, *p*>.05), while all other factors were controlled.

For the next benchmark of student engagement, student-faculty interaction, results show that when all other variables except transfers were controlled, 10.3% of the variance in SFI was explained by the model. The unstandardized beta coefficient for transfers equaled to -1.759 (*p*< .001). This indicates that transfer students scored .042 points lower on this benchmark than non-transfer students.

For the benchmark enriching education experiences, the adjusted *R* square=.169, meaning 16.9% of the variance in EEE is explained by the model. The unstandardized beta coefficient for vertical transfers equaled to -4.415 ($p<.001$), and this indicates that transfer students scored 4.415 points lower on this benchmark as compared to native students and the p value suggests that these results are statistically significant ($p<.001$).

Lastly, with regard to supportive campus environment, again controlling for all other variables, the adjusted *R* square=.050. This means that the model explains 5% of the variance in SCE. The unstandardized beta coefficient equaled to -1.247 ($p<.001$). This means that transfer students scored 1.247 points lower than non-transfers on this benchmark.

In summary, the results presented this chapter suggest that transfer students exhibit lower levels of student engagement than non-transfer students across student-faculty interactions, enriching educational experiences, and supportive campus environment. The results for academic challenge show that transfer students performed better on this benchmark as compared to native students. For active and collaborative learning the differences were not to found to be statistically significant when transfers were compared to native students.

Research Question 2

If differences in engagement level among the transfer student group exist, does such a relationship differ by transfer type (vertical, horizontal, vs. native)?

The results of the first multiple regression analysis showed that a significant relationship existed between the transfer status and student engagement benchmarks. Table 9 presents the results for transfer status by benchmark.

Table 9

Regression Analysis Summary for Student Engagement by Benchmark for Vertical and Horizontal Transfer Students in Comparison with Native Students

Model		*B*	Std. Error	Sig.
ACa				
	vertical transfer or not	0.538	0.216	*
	horizontal transfer or not	0.449	0.223	*
	Black or not	1.651	0.324	***
	Asian or not	0.212	0.38	
	Native American or not	1.747	0.899	
	Hispanic or not	2.154	0.356	***
	other or not	1.885	0.434	***
	female or not	1.942	0.185	***
	medgpa or not	-1.53	0.177	***
	lowgpa or not	-4.987	0.384	***
	work under 20 hours on campus	0.66	0.214	**
	work over 20 hours on campus	2.05	0.473	***
	work under 20 hours off campus	0.512	0.211	*

Model		*B*	Std. Error	Sig.
	work over 20 hours off campus	0.913	0.235	***
	fulltime or not	4.42	0.262	***
	on campus or not	-0.641	0.273	*
	walkdist or not	0.349	0.229	
	greek or not	1.135	0.701	
	liveother or not	2.387	0.371	***
	athlete or not	-0.509	0.351	
	artshum or not	1.297	0.278	***
	biosci or not	-0.311	0.353	
	business or not	-0.704	0.253	**
	education or not	0.553	0.315	
	engin or not	1.456	0.404	***
	physci or not	-1.745	0.501	***
	profes or not	2.703	0.325	***
	othrmaj or not	-0.136	0.463	
	masters or not	0.249	0.214	
	baccalaureate or not	1.595	0.304	***
	small or not	0.337	0.329	
	medium or not	0.219	0.22	
	IPEDS08: CONTROL	2.61	0.215	***
ACL				

Model		*B*	Std. Error	Sig.
	vertical transfer or not	0.079	0.255	
	horizontal transfer or not	-0.811	0.264	**
	Black or not	3.901	0.382	***
	Asian or not	-1.328	0.449	**
	Native American or not	1.15	1.062	
	Hispanic or not	2.814	0.421	***
	other or not	2.412	0.513	***
	female or not	0.436	0.218	*
	medgpa or not	-2.935	0.209	***
	lowgpa or not	-7.756	0.454	***
	work under 20 hours on campus	3.982	0.252	***
	work over 20 hours on campus	5.961	0.558	***
	work under 20 hours off campus	2.035	0.249	***
	work over 20 hours off campus	1.667	0.277	***
	fulltime or not	5.342	0.309	***
	on campus or not	-0.861	0.323	**
	walkdist or not	0.835	0.27	**
	greek or not	1.102	0.828	
	liveother or not	-4.095	0.439	***

Model		*B*	Std. Error	Sig.
	athlete or not	0.699	0.415	
	artshum or not	-0.936	0.329	**
	biosci or not	-0.773	0.417	
	business or not	2.91	0.299	***
	education or not	7.311	0.373	***
	engin or not	2.445	0.477	***
	physci or not	-1.128	0.592	
	profes or not	4.369	0.383	***
	othrmaj or not	1.626	0.547	**
	masters or not	1.435	0.253	***
	baccalaureate or not	1.421	0.359	***
	small or not	2.536	0.389	***
	medium or not	1.38	0.26	***
	IPEDS08: CONTROL	0.626	0.254	*
SFI				
	vertical transfer or not	-1.674	0.313	***
	horizontal transfer or not	-1.855	0.324	***
	Black or not	4.18	0.47	***
	Asian or not	-0.71	0.552	
	Native American or not	2.444	1.304	

Model		*B*	Std. Error	Sig.
	Hispanic or not	2.123	0.517	***
	other or not	2.147	0.63	**
	female or not	-0.673	0.268	**
	medgpa or not	-3.624	0.257	***
	lowgpa or not	-8.695	0.558	***
	work under 20 hours on campus	6.787	0.31	***
	work over 20 hours on campus	8.793	0.686	***
	work under 20 hours off campus	2.248	0.306	***
	work over 20 hours off campus	0.439	0.341	
	fulltime or not	5.56	0.38	***
	on campus or not	1.062	0.396	**
	walkdist or not	1.613	0.332	***
	greek or not	3.669	1.017	***
	liveother or not	-1.488	0.539	**
	athlete or not	1.18	0.509	*
	artshum or not	0.561	0.404	
	biosci or not	3.952	0.512	***
	business or not	-3.7	0.367	***
	education or not	0.929	0.458	*
	engin or not	-1.543	0.586	**

Model		*B*	Std. Error	Sig.
	physci or not	3.213	0.727	***
	profes or not	1.414	0.471	**
	othrmaj or not	-1.768	0.672	**
	masters or not	1.479	0.311	***
	baccalaureate or not	2.987	0.441	***
	small or not	4.22	0.477	***
	medium or not	2.474	0.319	***
	IPEDS08: CONTROL	-0.2	0.311	
EEE				
	vertical transfer or not	-4.783	0.263	***
	horizontal transfer or not	-4.002	0.272	***
	Black or not	1.065	0.394	**
	Asian or not	0.274	0.463	
	Native American or not	-0.528	1.094	
	Hispanic or not	1.844	0.433	***
	other or not	3.406	0.528	***
	female or not	2.01	0.225	***
	medgpa or not	-2.911	0.215	***
	lowgpa or not	-7.767	0.468	***
	work under 20	4.455	0.26	***

Model		*B*	Std. Error	Sig.
	hours on campus			
	work over 20 hours on campus	5.903	0.575	***
	work under 20 hours off campus	1.681	0.256	***
	work over 20 hours off campus	-0.394	0.286	
	fulltime or not	5.323	0.318	***
	on campus or not	4.167	0.332	***
	walkdist or not	4.021	0.278	***
	greek or not	8.827	0.853	***
	liveother or not	-2.64	0.452	***
	athlete or not	3.378	0.427	***
	artshum or not	-0.396	0.339	
	biosci or not	0.278	0.429	
	business or not	-2.95	0.308	***
	education or not	-0.021	0.384	
	engin or not	-1.761	0.491	***
	physci or not	-2.991	0.61	***
	profes or not	-0.49	0.395	
	othrmaj or not	-1.489	0.563	**
	masters or not	-2.033	0.261	***
	baccalaureate or not	-0.465	0.37	

Model		*B*	Std. Error	Sig.
	small or not	1.389	0.4	**
	medium or not	0.373	0.267	
	IPEDS08: CONTROL	3.254	0.261	***
SCE				
	vertical transfer or not	-0.475	0.294	
	horizontal transfer or not	-2.116	0.304	***
	Black or not	2.993	0.441	***
	Asian or not	0.322	0.518	
	Native American or not	0.977	1.225	
	Hispanic or not	3.844	0.485	***
	other or not	-0.888	0.592	
	female or not	0.382	0.252	
	medgpa or not	-2.391	0.241	***
	lowgpa or not	-7.144	0.524	***
	work under 20 hours on campus	2.773	0.291	***
	work over 20 hours on campus	3.615	0.644	***
	work under 20 hours off campus	0.248	0.287	
	work over 20 hours off campus	-1.041	0.32	**

Model		*B*	Std. Error	Sig.
	fulltime or not	1.307	0.357	***
	on campus or not	0.583	0.372	
	walkdist or not	0.83	0.312	**
	greek or not	0.537	0.955	
	liveother or not	1.772	0.506	***
	athlete or not	1.381	0.478	**
	artshum or not	-0.961	0.379	*
	biosci or not	-0.521	0.481	
	business or not	1.364	0.345	***
	education or not	2.431	0.43	***
	engin or not	-1.469	0.55	**
	physci or not	-1.247	0.683	
	profes or not	0.211	0.442	
	othrmaj or not	1.477	0.631	*
	masters or not	3.055	0.292	***
	baccalaureate or not	3.482	0.414	***
	small or not	1.102	0.448	*
	medium or not	0.435	0.299	
	IPEDS08: CONTROL	2.444	0.292	***

Note: Significance: *** p<.001; ** p<.05; *p<.01

The results shown in Table 9 are broken down in terms of transfer category, horizontal and vertical transfers. In this case, both are compared to native students, who were the reference group, Table 9 shows that there are statistically significant differences between vertical transfers, horizontal transfers, and native students in most benchmarks. For example, for academic challenge, when all variables except vertical and horizontal transfer status were controlled, the adjusted *R* square=.051, which indicates that 5.1% of the variance in ACa was explained by the model. The unstandardized coefficients for vertical transfers, *B*=.538 and $p<0.01$, which indicates that vertical transfer students scored 0.538 points higher than non-transfer students. Compared to native students, horizontal transfers score .449 points higher on this benchmark [*B*=.449 $p<.05$]. The model is statistically significant at $p<.05$.

For the active and collaborative learning, the results were different. The model showed no statistically significant differences between vertical transfer students and those who did not transfer on this benchmark (*B*= .79, $p>.05$), when all other factors were controlled. However, for horizontal transfers, *B*= -.811 ($p<.01$), with an *F* value of 76.551 and $p<.000$ and adjusted *R* square of .087, meaning that the model explains 8.7% of the variance in ACL for horizontal transfer students. The results indicate that, as compared to native students, horizontal transfers scored .087 points lower on this benchmark.

The results associated with the next benchmark of student engagement, student-faculty interaction shows that controlling for all other variables except vertical transfer and horizontal transfer, the adjusted *R* square= .103, meaning that 10.3% of the variance in SFI is explained by the model. The unstandardized beta coefficient for vertical transfer status equaled -1.674 ($p<$ .001). This indicates that vertical transfer students scored 1.674 points lower on this benchmark than non-transfer students. Similarly, the beta coefficient for horizontal students was found to be

-1.855 (p<.001), therefore, when compared to native students, horizontal transfers score with 1.855 points lower on this benchmark.

In enriching education experiences, the adjusted *R* square=.169, meaning 16.9% of the variance in EEE is explained by the model. The unstandardized beta coefficient for vertical transfers equaled -4.783 (p<.001), and this indicates that vertical transfer students scored 4.783 points lower on this benchmark than non-transfers. As far as horizontal transfers, the results indicate that *B*= -4.002 (p<.001), therefore this group of students scored 4.002 lower than native students, and the results were found to be statistically significant. This benchmark showed the highest differences between the groups.

Lastly, for the supportive campus environment benchmark, again when all other variables were controlled, adjusted *R* square=.051, This means that the model explains 5.1% of the variance in SCE The unstandardized beta for the vertical transfers coefficient was found to be -.475 (p>.05). This suggests that there was no significant difference between transfers and vertical transfer students. Differences between horizontal and native students on the SCE were found to exist, however. For horizontal transfers, B= -2.116 (p<.001), therefore horizontal transfers scored 2.116 points lower than native students. These results were found to be statistically significant.

In summary, the results, as presented in Table 9, suggest that differences in engagement levels existed within the both vertical and horizontal transfer students for academic challenge, student-faculty Interaction, and enriching education experiences when compared to native students. For active and collaborative learning and supportive campus environment, while both vertical and horizontal transfers showed differences when compared to the reference group of

native students, only the results for horizontal transfers were found to be significant for both benchmarks.

Research Question 3

What other student characteristics are associated with student engagement?

The data to address this research question are presented by benchmark in Table 9.

Academic Challenge-Aca. For the first benchmark, several variables were found to be significant factors that affected student engagement. In the race category, with White being the reference group, Black and Hispanic were found to be the two variables that affected academic challenge. Black students (B=1.651, p<.001), as compared to White students, scored 1.651 points higher on this benchmark. This is consistent with (see Chapter 2). Hispanic students were found to have a B value of 2.154 (p<.001), meaning they scored 2.154 points higher on this benchmark, which has not generally been supported by previous research. Gender was another characteristic that was found to affect ACa. Compared to male students, female students scored 1.942 points higher on ACa (B=1.942, p<.001). This finding was statistically suggesting significant.

Academic characteristics were also factors found to affect student engagement. With top GPA (or grades of A to A-) being the reference group, students who reported lower GPAs also had lower scores on the academic challenge indicator of student engagement. Compared to top grades A and A-, students with grades from B- to B+ and grades between C+ and C-, the students in the last two categories reported lower scores on this benchmark as well.

Employment was found to be a factor that affected student engagement as well. However, contrary to the literature previously discussed, all of the variables for working on and off campus were found to be statistically significant for ACa, and all of them received positive unstandardized beta coefficients. This suggests that, compared to the students who did not work

either on or off campus, the students who were employed either on or off campus performed better on the academic challenge benchmark.

However, in line with previous research on enrollment status and student engagement, for ACa, full-time students scored 4.42 points higher than their part-time counterparts (*B*=4.420, *p*<.001) confirming that spending time on campus is important in taking advantage of student engagement opportunities.

The variables for academic major showed mixed results (see Table 9). The majors that had statistically significant findings were arts and humanities, business, engineering, the physical sciences, and professional studies. They all showed significance of at least lower than .01 (*p*<.01).

Active and collaborative learning-ACL. While vertical transfer was not found to be a statistically significant factor for ACL, other student characteristics were found to be statistically significant. As regards race, compared to White students, Black students scored 3.901 points higher on this benchmark (*B*=3.90, *p*<.001), Asian students scored -.1.328 lower than White students (*B*= -1.328, *p*<.01), and Hispanic students scored 2.814 points higher than White students (*B*=2.814, *p*< .001). Gender also mattered for active and collaborative learning. Compared to male students, female students scored .436 points higher (*B*=.436, *p*<.05).

For academic characteristics, GPA was found to be a factor for ACL. Students who reported medium and low GPAs scored lower on this benchmark than students who reported high GPAs. For the employment variables, both working on and off campus were found to be statistically significant and all of those variables had positive unstandardized beta coefficients. This suggests that the students who were employed either on or off campus performed better on the active and collaborative learning benchmark. However, those students who were enrolled

full-time also scored 5.324 points higher than students who were enrolled part-time (*B*=5.324, *p*<.001).

Lastly, certain academic majors were found to be statistically significant factors for ACL. Arts and humanities, business, education, engineering, and professional studies were all statistically significant factors for this benchmark of student engagement.

Student-faculty interaction-SFI. For this benchmark, Black and Hispanic students also showed statistically significant results. When compared to White students, Black students scored 4.180 points higher (*B*=4.180, *p*<.001) and Hispanic students scored 2.123 points higher than White students (*B*=2.123, *p*<.001). This finding showed that there were statistically significant differences between White students and Black and Hispanic students with regard to student-faculty interaction. Unlike active and collaborative learning, here female students actually scored lower than their male counterparts. Female students scored .673 points lower (*B*=-.673, *p*<.05).

Students who reported top GPAs also outscored students with medium and low GPAs (*p* <.001), and again, full-time enrollment was found to be a statistically significant factor for SFI (*B*=5.560, *p*<.001). All academic majors except arts and humanities were found to be statistically significant in this case (with p-values of .05 or higher).

Enriching educational experiences-EEE. Once again, compared to White students, Black and Hispanic students were found to exhibit higher levels of engagement in this benchmark. Black students scored 1.065 points (*B*= 1.065and *p*<.001) and Hispanic students scored 1.844 points higher (*B*=.1.844 and *p*<.001) on EEE. Gender was a significant characteristic for this benchmark as well, with females outperforming males by 2.01 points (*B*=2.01, *p*<.001). GPA, full-time status, and living arrangement (all except other arrangement) were found to be statistically significant for this benchmark. Unlike the previous benchmarks, athletic status is

statistically significant factor for student engagement as exhibited by EEE. Athletes were found to be more engaged than non-athletes (B=3.378, p<.001). Lastly, among the academic majors, those that were statistically significant were Business, Engineering and Physical Sciences, while all other majors were not significant for this benchmark

Supportive campus environment-SCE. Lastly, for supportive campus environment as a factor of student engagement, Race, full-time status and major were found to be important factors. Black and Hispanic students again showed higher levels of student engagement, as indicated by the SCE benchmark. Compared to White students, Black students scored 2.993 points higher (B=2.993, p<.001) and Hispanic students scored 3.844 points higher than White students (B=3.844, p<.001). While gender was not found to be a statistically significant factor in SCE, full-time status was found to be statistically significant. Full-time students reported scores 1.307 points higher than students who were enrolled part-time. GPA once again mattered, as students with top GPAs scored better on this benchmark than students who reported medium and low grades on average. As far as academic majors, business, education, and engineering were found to be statistically significant factors for student engagement, as exhibited by the SCE benchmark.

Summary

The purpose of this study was to determine whether a relationship existed between transfer status and student engagement benchmarks. Besides exploring the relationship between transfer students and non-transfers and student engagement, this study also sought to determine if differences existed within the transfer student population; between vertical and horizontal transfer students. Lastly, this study looked for additional student characteristics that affected student engagement that were suggested by the literature. This chapter presented the results of

the data analysis as pertained to the research questions. The results suggest that there are differences between transfer status and further within the transfer group and native sunsets in student engagement. Additionally, many additional student characteristics were found to be statistically significant for student engagement. Chapter V provides a discussion of the results and presents implications for policy, practice, and research.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

During the past couple of decades the body of literature on student engagement has been grown. However, as scholars and researchers have focused on the benefits and challenges of student engagement, the transfer student population was largely neglected from their analysis. Most studies have focused on the traditional non-transfer student, and only a few studies have studied the transfer student experience. No studies have compared and contrasted the vertical and horizontal transfer path to a baccalaureate degree using the NSSE instrument on a national scale. This study has made an effort to add to the existing body of literature through its focus on transfer students, and specifically the vertical and horizontal subgroups of transfer students, in comparison to native students, who are a considerable number of the student population on most American campuses. This study is important for any U.S. institution as it analyzed student behavior and learning by using the student engagement benchmarks. This will allow institutions to compare results with a study on a national scale.

The main goals of this study were to study the relationship between transfer status and student engagement and to find out whether transfer types were related to differences in the engagement levels of transfer students. In addition, this study examined the role of student and institutional background characteristics in student engagement. The results can help administrators to better understand the needs of a truly heterogeneous student population and improve student success rates and measurable outcomes, such as graduation and persistence rates. Most importantly, stakeholders can use the results of in this study to inform and improve policy, programs, practices, and research.

The conceptual framework for this study relied on the construct of student engagement, and it included an integration of the theories of: quality of effort (Pace 1979, 1984), involvement theory (Astin 1993), Pascarella's model for assessing student change (Pascarella, 1985), and integration theory (Tinto 1987, 1993). In addition, current research on student factors affecting student engagement was reviewed and these factors were combined into three categories: transfer status, student characteristics, and institutional characteristics, and their relationships with the student engagement construct, as comprised of the five engagement benchmarks, were examined.

The data for this study came from the 2009 National Survey for Student Engagement, and it was the most recent dataset available at the start of this study. NSSE data were used with permission from The Indiana University Center for Postsecondary Research. In 2009 about 1.1 million first-year and senior students from 622 institutions in the United States and Canada were invited to participate in the 2009 NSSE survey. Of this population, 367, 318 students responded, and 65% of the participating institutions opted for the Web-only administration mode. About 98% of all respondents completed the survey online (NSSE, 2009a). In the 2009 NSSE administration, overall the institutions reflected the diversity of the U.S. higher education population with respect to institutional type, sector, region, and location (NSSE, 2009a). The final sample used in the present study contained 26,133 senior student respondents, 6,477 horizontal transfers, 7,429 vertical transfers, and 12, 227 native students from public and private, small and large institutions in the United States.

As noted in Chapter III, descriptive statistics about the population, and t-test and one-way ANOVA were used to compare the type of students across each benchmark. Multiple regression was used to address the relationship between transfer status and type of transfer and student engagement, while all other variables were controlled. Multiple regression was also used to

address research question 3, but student characteristics were also considered to address the question.

This chapter discusses the findings in the previously found. Then it provides a discussion about the policy and practice implications and provides suggestions for future research on the topic.

Summary of Findings and Conclusions

The descriptive analyses at the start of Chapter IV provided information about the makeup of the student population used for the sample. Female respondents outnumbered their male counterparts by almost 2 to 1, and the sample contained a high number of White students; about 75%. This is consistent with other studies. However, the ratio of transfer to native students was more evenly distributed, 53.2% and 46.8% respectively. Among the transfer students in the sample, 24.8% were horizontal transfers and 28.4% were vertical transfer students. This was thought to be a representative sample for comparison. A one-way analysis of variance (ANOVA) was used to find the means of each group and to determine whether there were differences in these means across each one of the student engagement benchmarks. The ANOVA used one categorical variable, classification, to compare the three groups of students in this study: native, vertical transfers, and horizontal transfers. The results showed that there are statistically significant differences in general.

The regression analysis revealed how prevalent these differences were, by benchmark. For academic challenge, the transfer group actually scored higher than the native students. As a whole, when compared with native students, the transfer students scored .018 points higher on this benchmark; a significant but perhaps not meaningful difference. Perhaps transfer students actually performed better on this benchmark because they chose to spend more of their time on

academics rather than social activities. By sub-group, vertical transfers scored .018 points higher than transfers, while horizontal transfers scored .014 points higher than transfers. Both results were statistically significant ($p<.05$). For active and collaborative learning, the differences between the vertical transfers and native students were not found to be significant, but when horizontal transfers were compared to native students, the native students were found to have higher levels of engagement. For student-faculty interaction, transfer students exhibited lower levels of engagement than native students. Both vertical and horizontal students were significantly less engaged than native students on this benchmark. This was also true for the enriching educational experiences benchmark. As a whole, the transfer students were significantly less engaged than the native student population, and further analysis of the transfer groups revealed this to be the case for both vertical and horizontal transfers. Lastly, for the fifth benchmark, supportive campus environment, the data analysis showed that there were differences in the engagement levels as well, but only between horizontal transfers and native students, with horizontal transfers scoring lower than native students. Vertical transfers were not found to have statistically different levels of student engagement compared to native students.

The regression analyses revealed that there were certain student and institutional characteristics that were associated with student engagement. As the review of the literature revealed, gender, race, enrollment status, GPA, employment status, residential status, and additional factors (such as major and athletic affiliation), as well as institutional characteristics such as control, classification, and size were previously found to affect student engagement.

Gender differences in engagement levels were discussed in the analysis of the dataset in the previous chapter. Female students showed significantly higher levels of engagement across all benchmarks except supportive campus environment. This finding is consisted with empirical

research, which has shown, in general, that women are more engaged than their male counterparts. Contrary to what previous research has suggested, this study found that, after controlling for other characteristics, Black and Hispanic students as compared with White students in the sample, had generally higher levels of student engagement across each benchmark. The research literature on race and student engagement (see Chapter III) indicated that Black students generally showed the highest levels of student engagement across all ethnic and racial groups, which is what this study confirmed; while Hispanic students showed the lowest (Temkin, 2004). In the sample used in this study, both Black and Hispanic students scored higher across each engagement benchmark than White students.

Enrollment status (part-time or full-time) was found to be a strong factor affecting student engagement across all benchmarks. Consistently across the benchmarks of student engagement, full-time students showed significantly higher levels of engagement than part-time students. Given the time spent on campus and opportunities to engage academically and socially inside and outside of the classroom, it is not surprising that this finding is consistent with the previous literature on the topic.

The GPA variable in this study was also found to have results that are consistent with the literature. Compared to students who self-reported high GPAs (falling between A- and A on average) the students who reported lower grades showed lower levels of student engagement across the benchmarks. Perhaps performing well academically allowed for more faculty and peer interactions, which lead to higher levels of student engagement in general and higher levels of motivation and satisfaction with the college experience.

The data on the employment characteristics of the students in the sample and the effect this variable on student engagement is somewhat mixed. While previous research has determined

that a negative relationship exists between employment and educational outcomes, this study found the relationship between employment status and student engagement to be largely positive across the benchmarks, regardless of hours committed to work and whether work was on or off campus. The data used for this study was collected in 2009, which is shortly after the financial crisis that affected the United States. While the residual effects of a recession usually take some time to affect the population, it is likely that the data for this study came at a time before these effects affected student choices between employment and education.

When residential status was included in the regression model, the results showed that students who lived on-campus in residence halls were more engaged than students who lived elsewhere. The reasons for this finding are likely the opportunities to interact with peers and faculty and taking advantage of engagement opportunities available to them, among which are social and academic support available to them. Living on campus has consistently been found to be a positive factor for student success, and this study confirms this finding.

There are a couple of other factors that the literature has suggested might affect student engagement, and they were also included in the regression model of this study. One of these factors is academic major. This study found mixed results regarding student engagement by academic major. While certain majors, such as business, were found to be overall negative factors for engagement, it is hard to draw conclusive general results, as the values for each major varied across each benchmark. Athletic affiliation also varied by benchmark and this finding contradicted some of the literature on the subject. Where it was found to be a significant was for students who were athletes, as they showed higher levels of student engagement than non-athletes, which is consistent with some of the literature reviewed in earlier chapters.

In addition to student factors, institutional features were also factored into the regression model to help to address the research questions. The results were mixed by benchmark, but overall smaller institutional size and control were found to be consistent with the findings in the literature. In general, smaller institutions and private colleges and universities seemed to be more successful in engaging their students than other types of institutions.

A multicollinearity test was performed to the specification of the model for the all variables used in this study in order to measure the correlation between the predictors in the model. The Variance Inflation Factors, or VIF values, were less than 3 for all of the independent variables. Since the VIF values were less than the critical value of 10, no multicollinearity issues impacted this study.

This statistical analysis indicated that the relationship between transfer status and student engagement was complex, and that there were multiple other factors that impacted it. In general, transfer students were found to show significantly lower levels of student engagement than native students, which indicates that institutions continue to be lacking in their efforts to integrate and engage transfer students. This study also found that within the transfer student population, differences in engagement levels existed on a national scale. This is a significant contribution to the research field. Horizontal transfer students were less engaged than native students across U.S. campuses. This indicates that community college transfers were more successful in integrating into the new institution than students who had previous experiences at 4-year institutions. This is consistent with the literature that suggests that community college students who are successful in transferring to 4-year institutions are likely to persist, engage, and graduate, while many horizontal transfers continue to struggle.

Factors such as a gender, race, enrollment status, and GPA have also been known to be factors that affect student engagement, and this study confirms these findings. Female students were found to generally be more engaged in their education and environment than male students, Black students tended to be more engaged than White students, and students who were enrolled full-time tended to be more integrated as well. Students who performed well academically also seemed to have higher rates of student engagement and benefitted more from their educational experiences than students who did not report top grades. All of these findings support the existing body of empirical research, and this study affirms the general understanding of the impact of these factors.

Implication for Policy and Practice

This study provides a comprehensive picture of the student engagement of transfer students on a national level. The descriptive statistics and regression analysis demonstrated that transfer students lag farther behind in student engagement than native students. The findings of this study have important implications for administrators, faculty, and other stakeholders interested in student engagement and success.

First, from a policy perspective, less engagement will ultimately lead to higher dropout rates, higher debt among students, and overall dissatisfaction with the educational experience. While this study did not collect any data on student debt, it collected data on student engagement, which is linked to the outcome of student success. Engagement is particularly problematic for transfer students, many of whom likely experience assimilation, integration, and academic challenges after the transfer. Furthermore, for horizontal transfers, who have already left another 4-year institution, engaging academically and socially continues to be a problem. These challenges will ultimately affect graduation rates and are likely to increase debt and cause

fewer employment opportunities than those available to students who successfully graduate from college.

Second, policy makers at the institutional level must create ways to facilitate the transfer process, and once developed, offer programs and services that specifically target transfer students and their needs. Issues such as initial academic barriers and dip in GPA after the transfer should already cause concerns for institutional policymakers, so remedies cannot be further delayed. Transfer policy already exists for community college transfers at many 4-year state institutions, but these policies need to be improved in order to integrate horizontal transfers as well. Programs such as transfer student orientation, advising, peer programs, and other academic programs must be initiated and be constantly improved in order to help the large number of transfer students and to lead to more successful engagement of this segment of the population.

Third, public policymakers are in a position to make a difference in higher education. Due to multiple priorities and limited resources, funding and distribution of resources are generally major concerns. Intentional and directional spending can have the highest impact on student engagement. Investing in quality research on student engagement, especially for transfer students, will be necessary to improve the transfer student experience. With large numbers of transfers across institutional type, but especially within and to public institutions of higher education, public policy makers are in a unique position to direct funding and efforts to better track transfer students and address their unique needs. In addition, assessment and program evaluation can help to differentiate ineffective and high-impact programs and services and will make the most difference to student success.

Implications for Future Research

This study focused on the relationship between transfer status and student engagement. This study contributes to the literature on student engagement in that it was conducted using a large national dataset and differences between the complex makeup of the transfer population were examined. There are several areas for future research that are worth mentioning. Hopefully, this study will inspire further research on the topic and initiate further research and conversations about the transfer student experience.

First, although there are several studies that have explored the transfer student experience, they are all on a small scale, usually sampling from a single institution. While this method has certain advantages, particularly for that specific institution and for comparison purposes, large-scale studies on this topic will provide more generalizable results. Furthermore, there is a lack of research that has examined student engagement as a dependent variable and that have used multiple regression. The results of this study found for the academic challenge, in particular, was that transfer students had higher levels of engagement for this benchmark than native students, and this finding should be further examined. More studies like this one will likely confirm or dispute the results of the present study.

Second, other types of studies, such as mixed-methods and qualitative studies can further contribute to the conversation and provide different perspectives. These types of studies could reveal a more in-depth research and direct student perspectives that will either validate or dispute the findings of this study. This type of analysis will allow respondents to elaborate on challenges to student engagement in an open-ended format, which is something that the NSSE and a quantitative analysis is not able to do.

Third, as mentioned in Chapter III, the data used for this survey is the NSSE 2009. A replication of the present study using a more recent dataset from the NSSE will further validate or dispute the findings of this study. Furthermore, even a longitudinal study of the student engagement of transfer students would likely provide additional information about the engagement patterns of transfer students over time.

Fourth, this study clearly addresses the engagement patterns of transfer students who have been successful in the transfer process. Further studies could examine students who were not successful after transfer, and such a study would likely to reveal meaningful information and provide important policy and practice implications.

Fifth, designing a study on this topic using hierarchical linear modeling (HLM) would be another way to build on this research. The use of HLM analysis would allow researchers to analyze students nested within types of institutions, as this is data available in the NSSE dataset. Clustered data can be incorporated into the data analysis and this could lead to a deeper understanding of the transfer student engagement experiences.

Lastly, a more representative sample would lead to more comprehensive results. Data indicate that 58% of all students ages 18-24 who enrolled in higher education are White, and that they represent 69% of all bachelor's degrees awarded (Krogstad & Fry, 2014). In the sample used in the present study this population was represented at a much higher level. The descriptive statistics used in the present study revealed that female respondents were disproportionally higher than male respondents and that White students comprised 75% of the sample. This is similar to other studies that have used NSSE data. While this disproportion between gender and race is common among survey respondents, the results of the analysis of such data reveal that data may be skewed to a particular segment of the population and may not be subject to

generalizations. Finding a way to integrate more diverse respondent base or using other datasets available will be beneficial for researcher studying the topic of student engagement.

Concluding Comments

As institutions continue to focus efforts toward improving student engagement, it is important that stakeholders do not lose focus of the importance of engagement for all students on campus. The path to college success is often indirect for a very large number of students. The transfer function of the U.S. system of higher education has allowed students to opt out to institutions that better serve and address their needs. But this study has confirmed that not all college students successfully engage on campus, and student engagement has already been proven to matter for student success. The more engaged students become with their institutions, the more likely they are to succeed academically and to graduate. This study affirms that institutional leaders have failed to create opportunities for engagement and a balanced environment for transfer students, and hopefully this line of research will inspire more discussion on the topic and the change needed in order to see all students succeed.

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APPENDIX A: National Survey of Student Engagement 2009 (Paper Version)

National Survey of Student Engagement 2009

The College Student Report

1 **In your experience at your institution during the current school year, about how often have you done each of the following? Mark your answers in the boxes. Examples: ☒ or ☕**

	Very often	Often	Some-times	Never
a. Asked questions in class or contributed to class discussions	☐	☐	☐	☐
b. Made a class presentation	☐	☐	☐	☐
c. Prepared two or more drafts of a paper or assignment before turning it in	☐	☐	☐	☐
d. Worked on a paper or project that required integrating ideas or information from various sources	☐	☐	☐	☐
e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	☐	☐	☐	☐
f. Come to class without completing readings or assignments	☐	☐	☐	☐
g. Worked with other students on projects **during class**	☐	☐	☐	☐
h. Worked with classmates **outside of class** to prepare class assignments	☐	☐	☐	☐
i. Put together ideas or concepts from different courses when completing assignments or during class discussions	☐	☐	☐	☐
j. Tutored or taught other students (paid or voluntary)	☐	☐	☐	☐
k. Participated in a community-based project (e.g., service learning) as part of a regular course	☐	☐	☐	☐
l. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	☐	☐	☐	☐
m. Used e-mail to communicate with an instructor	☐	☐	☐	☐
n. Discussed grades or assignments with an instructor	☐	☐	☐	☐
o. Talked about career plans with a faculty member or advisor	☐	☐	☐	☐
p. Discussed ideas from your readings or classes with faculty members outside of class	☐	☐	☐	☐
q. Received prompt written or oral feedback from faculty on your academic performance	☐	☐	☐	☐
r. Worked harder than you thought you could to meet an instructor's standards or expectations	☐	☐	☐	☐
s. Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	☐	☐	☐	☐
t. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	☐	☐	☐	☐
u. Had serious conversations with students of a different race or ethnicity than your own	☐	☐	☐	☐
v. Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	☐	☐	☐	☐

2 **During the current school year, how much has your coursework emphasized the following mental activities?**

	Very much	Quite a bit	Some	Very little
a. **Memorizing** facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	☐	☐	☐	☐
b. **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	☐	☐	☐	☐
c. **Synthesizing** and organizing ideas, information, or experiences into new, more complex interpretations and relationships	☐	☐	☐	☐
d. **Making judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	☐	☐	☐	☐
e. **Applying** theories or concepts to practical problems or in new situations	☐	☐	☐	☐

SAMPLE

3 **During the current *school year*, about how much reading and writing have you done?**

a. Number of assigned textbooks, books, or book-length packs of course readings

☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment

☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

c. Number of written papers or reports of **20 pages or more**

☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

d. Number of written papers or reports **between 5 and 19 pages**

☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

e. Number of written papers or reports of **fewer than 5 pages**

☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

4 **In a *typical week*, how many homework problem sets do you complete?**

	None	1-2	3-4	5-6	More than 6
a. Number of problem sets that take you **more** than an hour to complete	☐	☐	☐	☐	☐
b. Number of problem sets that take you **less** than an hour to complete	☐	☐	☐	☐	☐

5 **Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work.**

Very little ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 Very much

6 **During the current school year, about how often have you done each of the following?**

	Very often	Often	Some-times	Never
a. Attended an art exhibit, play, dance, music, theater, or other performance	☐	☐	☐	☐
b. Exercised or participated in physical fitness activities	☐	☐	☐	☐
c. Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.)	☐	☐	☐	☐
d. Examined the strengths and weaknesses of your own views on a topic or issue	☐	☐	☐	☐
e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	☐	☐	☐	☐
f. Learned something that changed the way you understand an issue or concept	☐	☐	☐	☐

7 **Which of the following have you done or do you plan to do before you graduate from your institution?**

	Done	Plan to do	Do not plan to do	Have not decided
a. Practicum, internship, field experience, co-op experience, or clinical assignment	☐	☐	☐	☐
b. Community service or volunteer work	☐	☐	☐	☐
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	☐	☐	☐	☐
d. Work on a research project with a faculty member outside of course or program requirements	☐	☐	☐	☐
e. Foreign language coursework	☐	☐	☐	☐
f. Study abroad	☐	☐	☐	☐
g. Independent study or self-designed major	☐	☐	☐	☐
h. Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)	☐	☐	☐	☐

8 **Mark the box that best represents the quality of your relationships with people at your institution.**

a. Relationships with **other students**

Unfriendly, Unsupportive, Sense of alienation ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 Friendly, Supportive, Sense of belonging

b. Relationships with **faculty members**

Unavailable, Unhelpful, Unsympathetic ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 Available, Helpful, Sympathetic

c. Relationships with **administrative personnel and offices**

Unhelpful, Inconsiderate, Rigid ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 Helpful, Considerate, Flexible

SAMPLE

9 About how many hours do you spend in a typical 7-day week doing each of the following?

a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

b. Working for pay **on campus**

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

c. Working for pay **off campus**

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

d. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

e. Relaxing and socializing (watching TV, partying, etc.)

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

f. Providing care for dependents living with you (parents, children, spouse, etc.)

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

g. Commuting to class (driving, walking, etc.)

☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

Hours per week

10 To what extent does your institution emphasize each of the following?

	Very much	Quite a bit	Some	Very little
a. Spending significant amounts of time studying and on academic work	☐	☐	☐	☐
b. Providing the support you need to help you succeed academically	☐	☐	☐	☐
c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	☐	☐	☐	☐
d. Helping you cope with your non-academic responsibilities (work, family, etc.)	☐	☐	☐	☐
e. Providing the support you need to thrive socially	☐	☐	☐	☐
f. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)	☐	☐	☐	☐
g. Using computers in academic work	☐	☐	☐	☐

11 To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Acquiring a broad general education	☐	☐	☐	☐
b. Acquiring job or work-related knowledge and skills	☐	☐	☐	☐
c. Writing clearly and effectively	☐	☐	☐	☐
d. Speaking clearly and effectively	☐	☐	☐	☐
e. Thinking critically and analytically	☐	☐	☐	☐
f. Analyzing quantitative problems	☐	☐	☐	☐
g. Using computing and information technology	☐	☐	☐	☐
h. Working effectively with others	☐	☐	☐	☐
i. Voting in local, state, or national elections	☐	☐	☐	☐
j. Learning effectively on your own	☐	☐	☐	☐
k. Understanding yourself	☐	☐	☐	☐
l. Understanding people of other racial and ethnic backgrounds	☐	☐	☐	☐
m. Solving complex real-world problems	☐	☐	☐	☐
n. Developing a personal code of values and ethics	☐	☐	☐	☐
o. Contributing to the welfare of your community	☐	☐	☐	☐
p. Developing a deepened sense of spirituality	☐	☐	☐	☐

12 Overall, how would you evaluate the quality of academic advising you have received at your institution?

☐ Excellent
☐ Good
☐ Fair
☐ Poor

13 How would you evaluate your entire educational experience at this institution?

☐ Excellent
☐ Good
☐ Fair
☐ Poor

14 If you could start over again, would you go to the *same institution* you are now attending?

☐ Definitely yes
☐ Probably yes
☐ Probably no
☐ Definitely no

PREVIEW

15 Write in your year of birth: 19__

16 Your sex:
- ☐ Male
- ☐ Female

17 Are you an international student or foreign national?
- ☐ Yes
- ☐ No

18 What is your racial or ethnic identification? (Mark only one.)
- ☐ American Indian or other Native American
- ☐ Asian, Asian American, or Pacific Islander
- ☐ Black or African American
- ☐ White (non-Hispanic)
- ☐ Mexican or Mexican American
- ☐ Puerto Rican
- ☐ Other Hispanic or Latino
- ☐ Multiracial
- ☐ Other
- ☐ I prefer not to respond

19 What is your current classification in college?
- ☐ Freshman/first-year
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Unclassified

20 Did you begin college at your current institution or elsewhere?
- ☐ Started here
- ☐ Started elsewhere

21 Since graduating from high school, which of the following types of schools have you attended other than the one you are attending now? (Mark all that apply.)
- ☐ Vocational or technical school
- ☐ Community or junior college
- ☐ 4-year college other than this one
- ☐ None
- ☐ Other

22 Thinking about this current academic term, how would you characterize your enrollment?
- ☐ Full-time
- ☐ Less than full-time

23 Are you a member of a social fraternity or sorority?
- ☐ Yes
- ☐ No

24 Are you a student-athlete on a team sponsored by your institution's athletics department?
- ☐ Yes
- ☐ No (Go to question 25.)

On what team(s) are you an athlete (e.g., football, swimming)? Please answer below:

25 What have most of your grades been up to now at this institution?
- ☐ A
- ☐ A-
- ☐ B+
- ☐ B
- ☐ B-
- ☐ C+
- ☐ C
- ☐ C- or lower

26 Which of the following best describes where you are living now while attending college?
- ☐ Dormitory or other campus housing (not fraternity/sorority house)
- ☐ Residence (house, apartment, etc.) within **walking distance** of the institution
- ☐ Residence (house, apartment, etc.) within **driving distance** of the institution
- ☐ Fraternity or sorority house
- ☐ None of the above

27 What is the highest level of education that your parent(s) completed? (Mark one box per column.)

Father	Mother	
☐	☐	Did not finish high school
☐	☐	Graduated from high school
☐	☐	Attended college but did not complete degree
☐	☐	Completed an associate's degree (A.A., A.S., etc.)
☐	☐	Completed a bachelor's degree (B.A., B.S., etc.)
☐	☐	Completed a master's degree (M.A., M.S., etc.)
☐	☐	Completed a doctoral degree (Ph.D., J.D., M.D., etc.)

28 Please print your major(s) or your expected major(s).

a. Primary major (Print only one.):

b. If applicable, second major (not minor, concentration, etc.):

THANKS FOR SHARING YOUR RESPONSES!

After completing the survey, please put it in the enclosed postage-paid envelope and deposit it in any U.S. Postal Service mailbox. Questions or comments? Contact the National Survey of Student Engagement, Indiana University, 1900 East Tenth Street, Suite 419, Bloomington IN 47406-7512 or nsse@indiana.edu or www.nsse.iub.edu. Copyright © 2008 Indiana University.

SAMPLE

APPENDIX B: Description of NSSE items and list of the components items

NSSE national survey of student engagement

Benchmarks of Effective Educational Practice

The benchmarks are based on 42 key questions from the NSSE survey that capture many vital aspects of the student experience. These student behaviors and institutional features are some of the more powerful contributors to learning and personal development.

LAC

Level of Academic Challenge

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

Activities and conditions:

- Time spent preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports between 5 and 19 pages
- Number of written papers or reports fewer than 5 pages
- Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory
- Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences
- Coursework emphasizes: Making judgments about the value of information, arguments, or methods
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Campus environment emphasizes spending significant amounts of time studying and on academic work

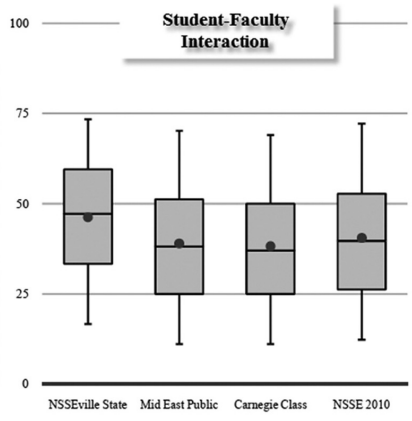
ACL

Active and Collaborative Learning

Students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students to deal with the messy, unscripted problems they will encounter daily during and after college.

Activities:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)



SFI

Student-Faculty Interaction

Students see first-hand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

Activities:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- Worked with a faculty member on a research project

SCE

Supportive Campus Environment

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.

Conditions:

- Campus environment provides support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

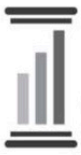
EEE

Enriching Educational Experiences

Complementary learning opportunities inside and outside the classroom augment the academic program. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships, community service, and senior capstone courses provide students with opportunities to synthesize, integrate, and apply their knowledge. Such experiences make learning more meaningful and, ultimately, more useful because what students know becomes a part of who they are.

Activities and conditions:

- Talking with students with different religious beliefs, political opinions, or values
- Talking with students of a different race or ethnicity
- An institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds
- Using electronic technology to discuss or complete assignments
- Participating in:
  - Internships or field experiences
  - Community service or volunteer work
  - Foreign language coursework
  - Study abroad
  - Independent study or self-assigned major
  - Culminating senior experience
  - Co-curricular activities
  - Learning communities



NSSE
national survey of student engagement

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